

P-364

NASA Technical Memorandum 87690, Part 3

1984 DIRECT STRIKE LIGHTNING DATA

(NASA-TM-87690-Pt-3) THE 1984 DIRECT STRIKE
LIGHTNING DATA, PART 3 (NASA) 364 p
CSCL 04B

N90-10507

Unclass
41/47 0237131

Mitchel E. Thomas

and

Harold K. Carney

September 1986

Date for general release September 30, 1989



National Aeronautics and
Space Administration

Langley Research Center
Hampton, Virginia 23665



.



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*Part 1 and Part 2 published under separate cover.

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-038

LEC 1 RUN NO. 1

5.002

I_n A

10×10^3

20:52:47.6
CHANNEL NO. 1.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-038

EC 1 RUN NO. 1

5.002

I, A

20:52:47.6
CHANNEL NO. 1.2

MICROSECONDS

F=106 LIGHTNING/ 84-038

LEC2 RUN NO. 1

3.002

D_t A/m²

-3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

-5 -4 -3 -2 -1 0 1 2 3

20:52:47.6
CHANNEL NO. 2.0

MICROSECONDS

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-038

LEC2 RUN NO. 1

S.002

i A/s

24 X 10¹⁰

20:32:47.6
CHANNEL NO. 2.1

MICROSECONDS

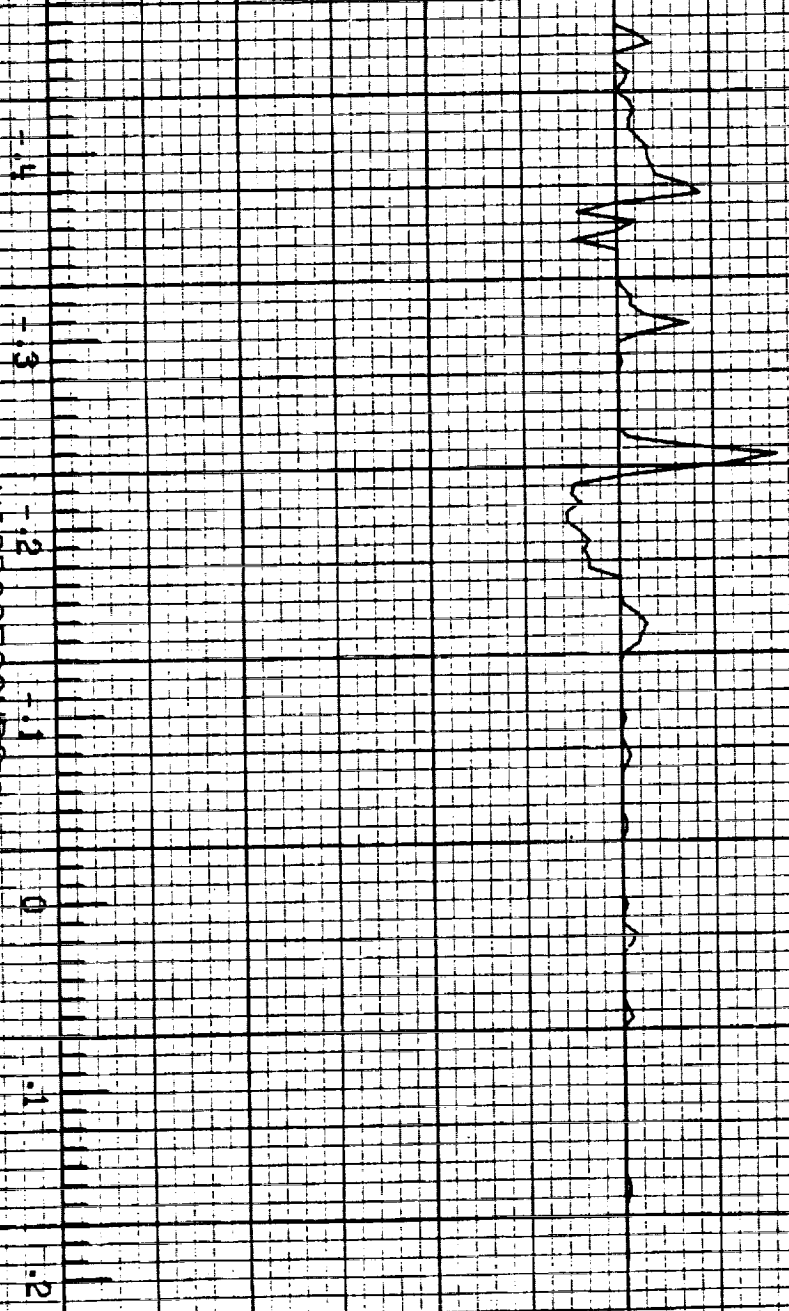
F-106 LIGHTNING/ 84-038

LEC 2 RUN NO. 1

S.002

B₁ T/s

1800
1600
1400
1200
1000
800
600
400
200
0



20:52:47.6
CHANNEL NO. 2.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-038

1 EC 3 RUN NO. 1

5.002

\hat{D}_{w1}

A/m^2

20:52:47.8
CHANNEL NO. 3.1

MICROSECONDS

-106 LIGHTNING/ 84-038

LEC 3 RUN NO. 1

0.002

D_r A/m²

12 0 0 0 0 12

-1.0

-0.8

-0.6

-0.4

-0.2

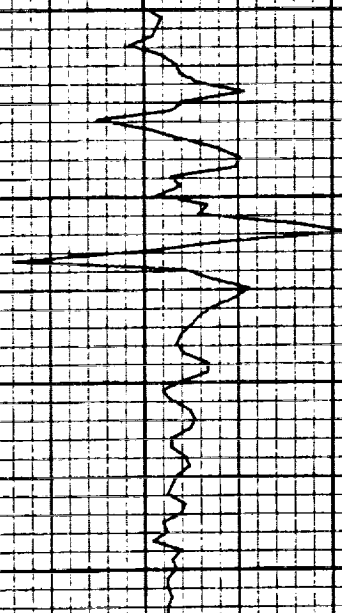
0

0.2

0.4

MICROSECONDS

20:52:47.8
CHANNEL NO. 3.2



ORIGINAL PAGE IS
OF POOR QUALITY

-106 LIGHTNING/ 84-038

LEC 4 RUN NO. 1

S.002

TP 100

V_w

V

20:52:47.8
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-D38

LEC 4 RUN NO. 1

S.002

TP 101

V_{fb} V

20:52:47.8
CHANNEL NO. 4.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-038

1 EC 4 RUN NO. 1

5.002

TP123

A

20:52:34.7.6
CHANNEL NO. 4.2

MICROSECONDS

F-106 LIGHTNING/ 84-043

IFC 1 RUN NO. 1

5.001

T_r A

1.8 1.6 1.4 1.2 1.0 .8 .6 .4 .2 0

10×10^3

20:59:26.0
CHANNEL NO. 1.1

MICROSECONDS

.8 1.6 2.4 3.2 4.0 4.8

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

1 FC 1 RUN NO. 1

5.001

I, A

10×10^3

20:50:26.0
CHANNEL NO. 1.2

MICROSECONDS

W

F=106 LIGHTNING/ 84-043

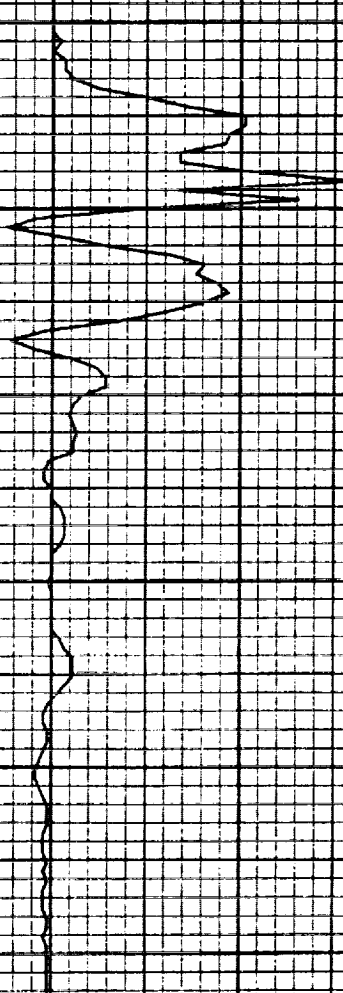
1 FC 2 RUN NO. 1

5.001

D_1 A/m²

20:50:26.0
CHANNEL NO. 2.0

MICROSECONDS



ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

LECD RIN NO. 1

5.001

$\frac{1}{s}$ A/s

2.4×10^{-9}

20:50:26.0
CHANNEL NO. 2.1

MICROSECONDS

F-106 LIGHTNING/ 84-043

FC2 RUN NO. 1

5.001

\dot{D}_1 T/s

1800 1600 1400 1200 1000 800 600 400 200 0

-.4

-.2

0

.2

.4

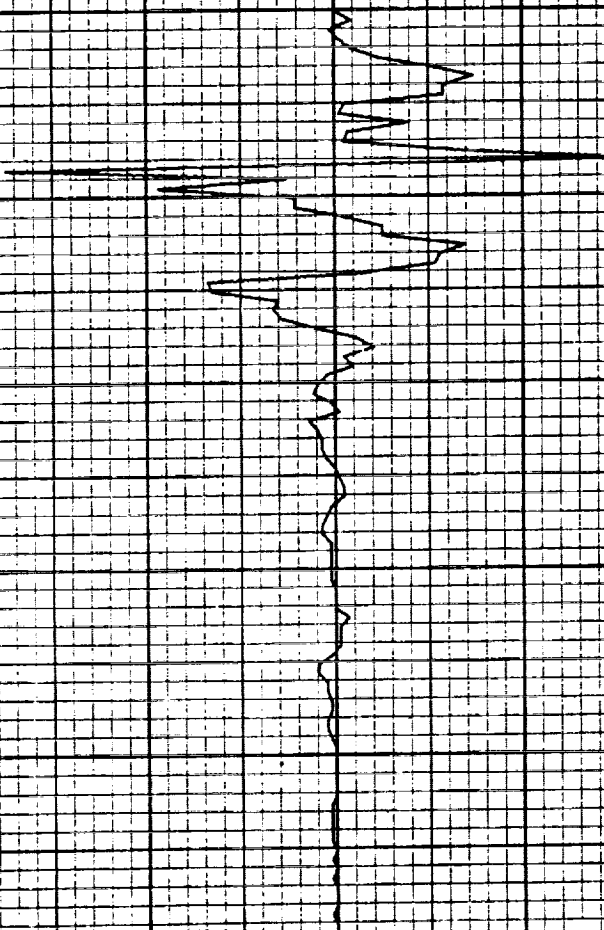
.6

.8

1.0

MICROSECONDS

20:50:26.0
CHANNEL NO. 2.2



ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

LEC 4 RUN NO. 1

5.001

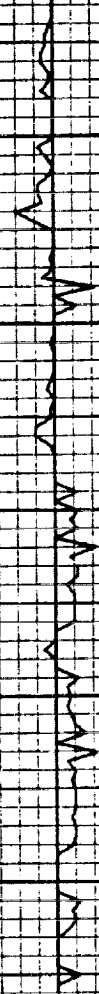
TP 100

V₊

V

20:50:26.0
CHANNEL NO. 4.0

MICROSECONDS



F-106 LIGHTNING/ 84-043

TECH RUN NO. 1

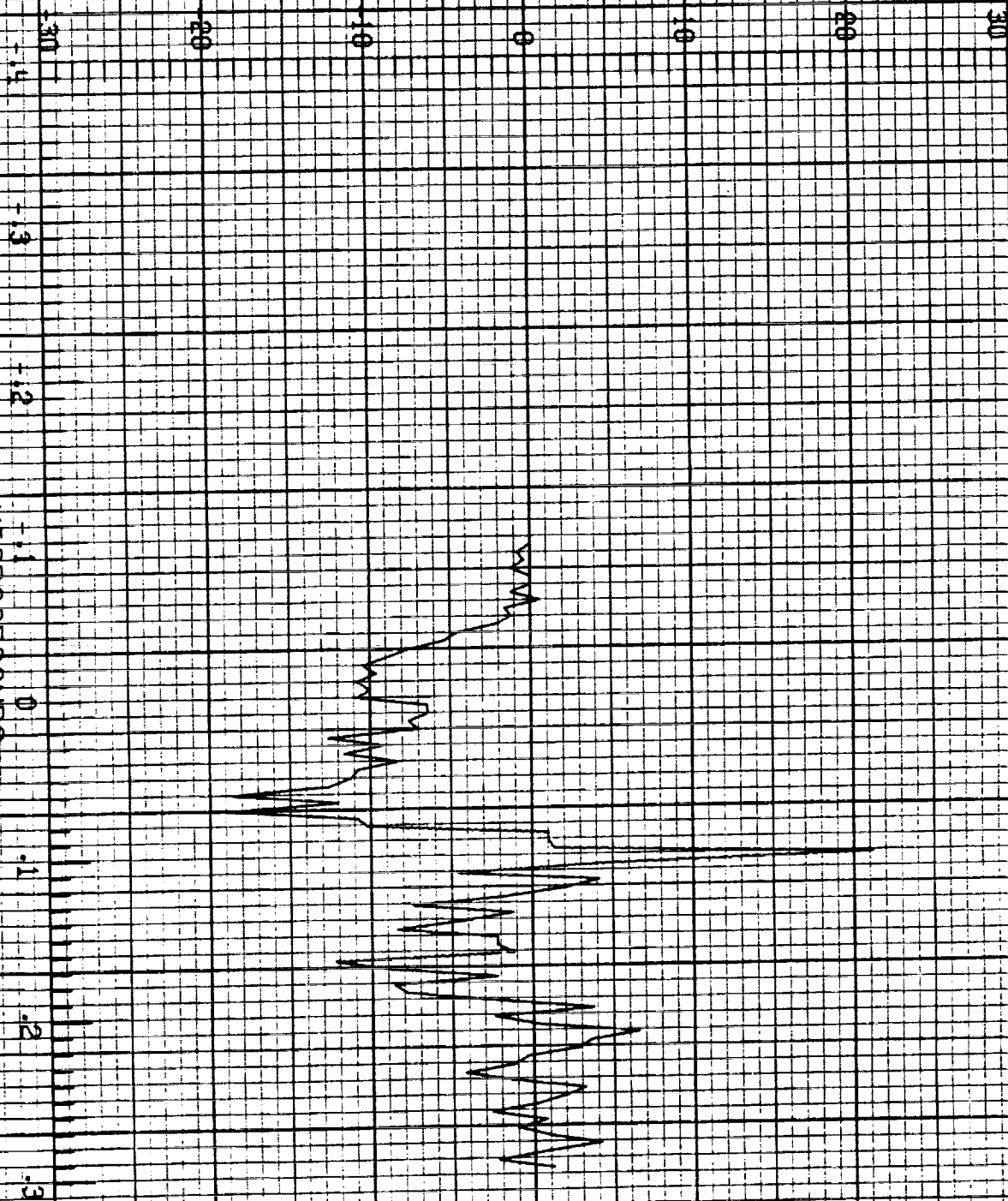
5.000

TP 101

V_{fb} V

20:50:26.0
CHANNEL NO. 4.1

MICROSECONDS



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F=106 LIGHTNING/ 84-043

LECH RUN NO. 1

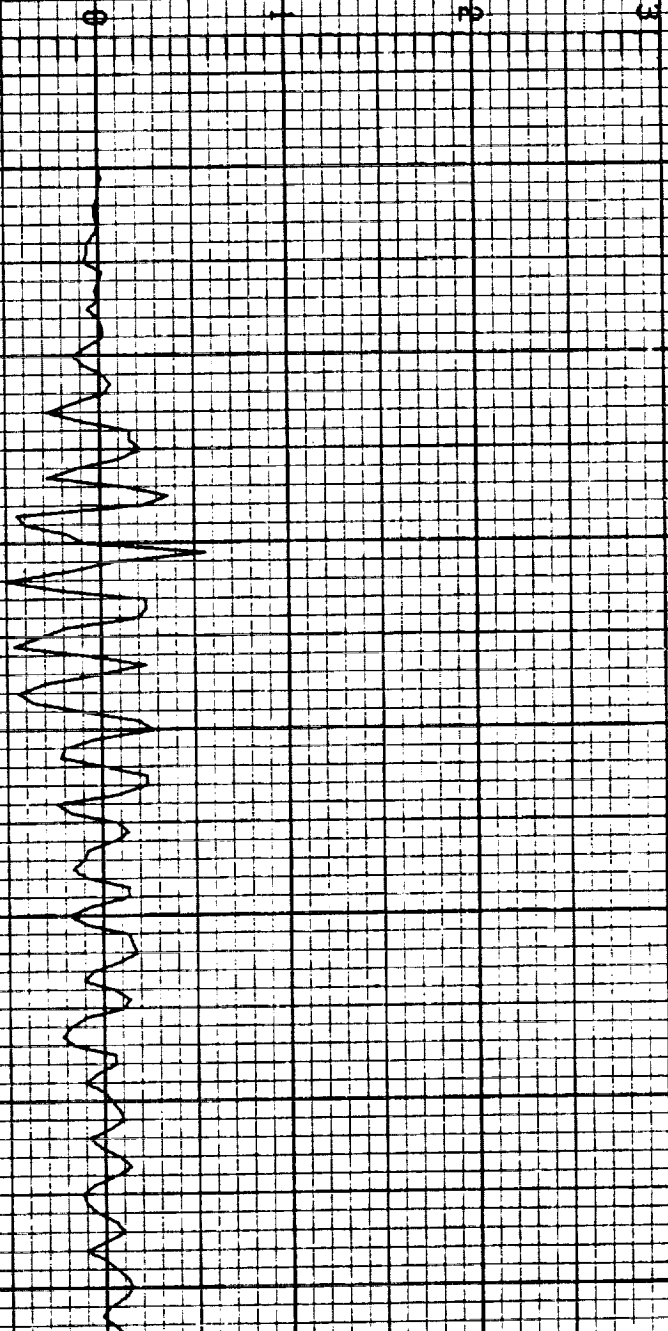
3.001

TP123

A

20:50:26.9
CHANNEL NO. 4.2

MICROSECONDS



F-106 LIGHTNING/ 84-043

IFC 1 RUN NO. 2

5.002

I_n A

10 x 10⁸

21:04:12.0
CHANNEL NO. 1-1

MICROSECONDS

1000

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

LEC 1 RUN NO. 2

5.002

I_t A

10×10^3

21:04:12.0
CHANNEL NO. 1.2

MICROSECONDS

F-106 LIGHTNING/ 84-043

LEC 2 RUN NO. 2

3.002

$D, A/m^2$

21:04:12.0
CHANNEL NO. 2.0

MICROSECONDS

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

1 FC2 RUN NO. 2

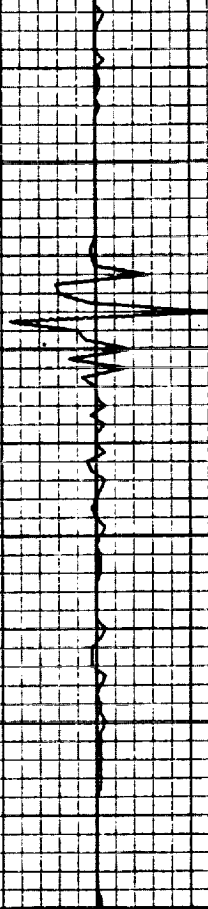
5.002

I A/s

24 x 10⁴

21:04:12.0
CHANNEL NO. 2.1

MICROSECONDS



F-106 LIGHTNING/ 84-043

LEC 2 RUN NO. 2

6.002

\bar{B}_1 $T/5$

1800
1200
600
0
-600
-1200
-1800

-1.4

-1.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

21:04:12.0
CHANNEL NO. 2.2

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-043

1 FC4 RUN NO. 2

5.002

TP 100

V₊ V

21:04:12.0
CHANNEL NO. 4.0

MICROSECONDS

1005

F-106 LIGHTNING/ 84-043

LECH RUN NO. 2

6.002

TP 101

V_r V

21:04:12.0
CHANNEL NO. 4.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-043

LEC 4 RUN NO. 2

3.002

TP123 A

21:04:12.0
CHANNEL NO. #.2

MICROSECONDS

F-106 LIGHTNING/ 84-043

LEC 1 RIN NO. 3

6.008

I_r A

10×10^3

12

9

9

9

9

9

9

0

.8

1.6

2.4

3.2

4.0

4.8

MICROSECONDS

21:14:10.1
CHANNEL NO. 1.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-105 LIGHTNING/ 84-043

LEC 1 RUN NO. 3

3.003

I, A

21:14:10.1
CHANNEL NO. 1.2

MICROSECONDS

10×10^3

F-106 LIGHTNING/ 84-043

LEO2 RUN NO. 3

6.003

D_1 A/m²

21:14:10.1
CHANNEL NO. 2.0

MICROSECONDS

1010

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-043

LEC 2 RUN NO. 3

5.003

I A/s

24×10^4

21:14:10.1
CHANNEL NO. 2.1

MICROSECONDS

F-106 LIGHTNING/ 84-043

LEC2 RUN NO. 3

3.003

B₁ T/s

21:14:10.1
CHANNEL NO. 2.2

MICROSECONDS

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

LEC 4 RUN NO. 3

6.008

TP 100

V_w

V_i

21:14:10.1
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-043

1 FC 4 RUN NO. 3

6.003

V_r V

30 20 10 0 10 20 30

-7

-6

-5

-4

-3

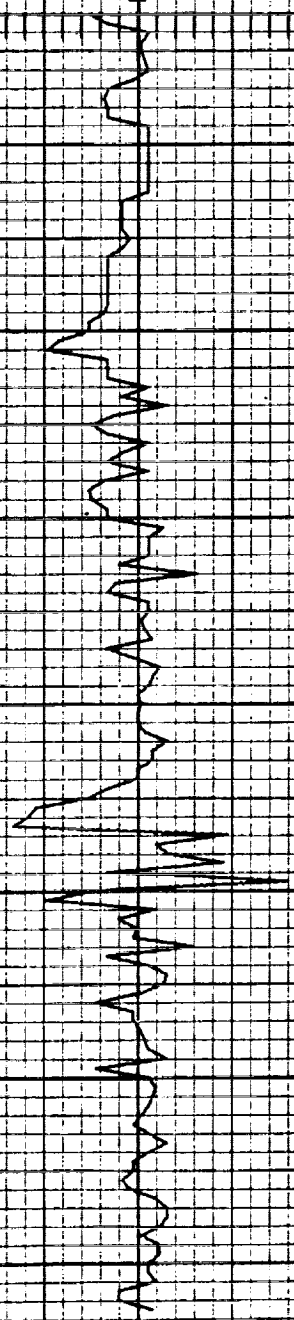
-2

-1

0

21:14:10.1
CHANNEL NO. 4.1

MICROSECONDS



ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

LECH RUN NO. 3

3.008

TP123 A

21:14:10.1
CHANNEL NO. 4-2

MICROSECONDS

F-106 LIGHTNING/ 84-043

LFC1 RUN NO. 4

6.004

I_n A

21:16:22.5
CHANNEL NO. 1.1

MICROSECONDS

10 x 10³

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

LEC 1 RUN NO. 4

3.00H

I₁ A

21:10:22.5
CHANNEL NO. 1.2

MICROSECONDS

F-105 LIGHTNING/ 84-043

LEC 2 RUN NO. 4

3.004

D_1 A/m²

21:16:22.5
CHANNEL NO. 2.0

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-043

LEC 2 RUN NO. 4

6.004

I A/s

21:16:22.5
CHANNEL NO. 2.1

MICROSECONDS

24 x 10¹⁰

F-106 LIGHTNING/ 84-043

LEC 2 RUN NO. 4

3.00#

\bar{B}_1 $\tau/5$

21:16:22.5
CHANNEL NO. 2.2

MICROSECONDS

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

LEC 4 RUN NO. 4

5.004

TP 100

V₊ V

21:16:22.5
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-043

1 FC 4 RUN NO. 4

6.004

TP 101

V_{fb} V

21:16:22.5
CHANNEL NO. 4.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-043

LEC 4 RUN NO. 4

5.00H

TP123 A

21:16:22.8
CHANNEL NO. 4.2

MICROSECONDS

F-106 LIGHTNING/ 84-043

1 FC 1 RUN NO. 5

3.005

I_n A

1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0

0.8 1.6 2.4 3.2 4.0 4.8

MICROSECONDS

21:19:51.5
CHANNEL NO. 1.1

ORIGINAL PAGE IS
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F=106 LIGHTNING/ 84-043

LEC1 RUN NO. 5

8.005

I_t A

21:19:51.5
CHANNEL NO. 1.2

MICROSECONDS

F-106 LIGHTNING/ 84-043

LEC2 RUN NO. 5

3.005

D_t A/m²

21:19:51.5
CHANNEL NO. 2.0

MICROSECONDS

1026

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-043

IFC2 RUN NO. 5

8.005

I A/s

21:19:51.5
CHANNEL NO. 2.1

MICROSECONDS

24 x 10¹⁰

F-106 LIGHTNING/ 84-043

LEC 2 RUN NO. 5

3.005

B₁ T/5

1800
1200
600
0
-600
-1200
-1800

.4

.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

21:19:51.5
CHANNEL NO. 2.2

1028

ORIGINAL PAGE 19
OF POOR QUALITY

F-106 LIGHTNING/ 84-043

LECH RUN NO. 5

B.005

TP 100

V_w V

21:19:51.5
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-043

LEC 4 RUN NO. 5

3.005

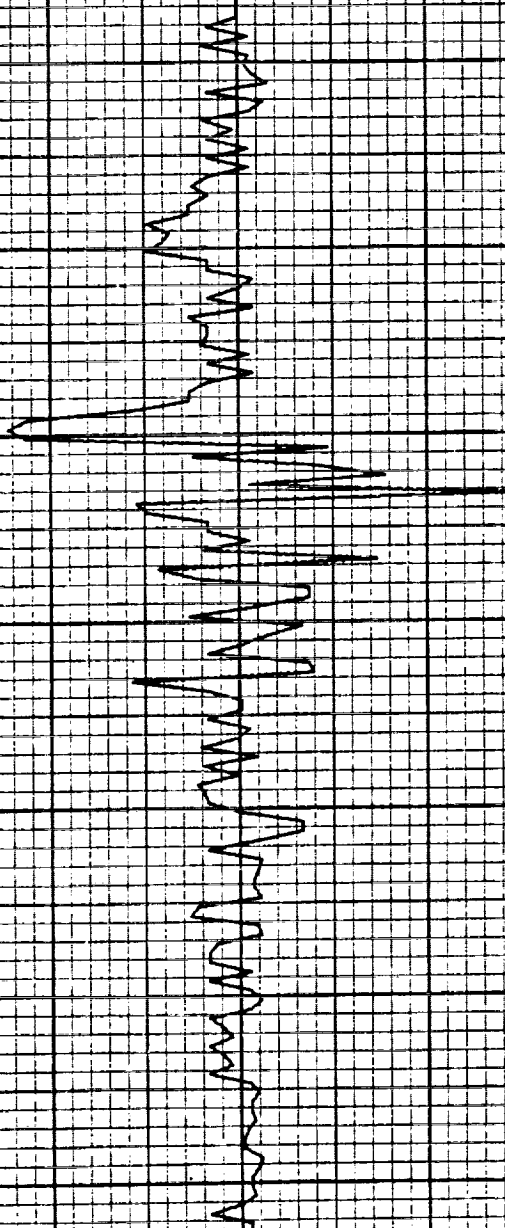
TP 101

V₁₀ V

21:19:51.5
CHANNEL NO. 4.1

MICROSECONDS

103.0



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-043

LEC 4 RUN NO. 5

8.005

TP123 A

21:19351.5
CHANNEL NO. 4.2

MICROSECONDS

1031

F=106 LIGHTNING/ 84-043

LEC1 RUN NO. 6

6.006

I_n A

10×10^3

1.8

1.6

1.4

1.2

1.0

0.8

0

0.8

1.6

2.4

3.2

4.0

4.8

MICROSECONDS

21:28:57.9
CHANNEL NO. 1.1

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

IFC 1 RUN NO. 6

5.006

I, A

21:28:37.9
CHANNEL NO. 1.2

MICROSECONDS

1033

F-106 LIGHTNING/ 84-043

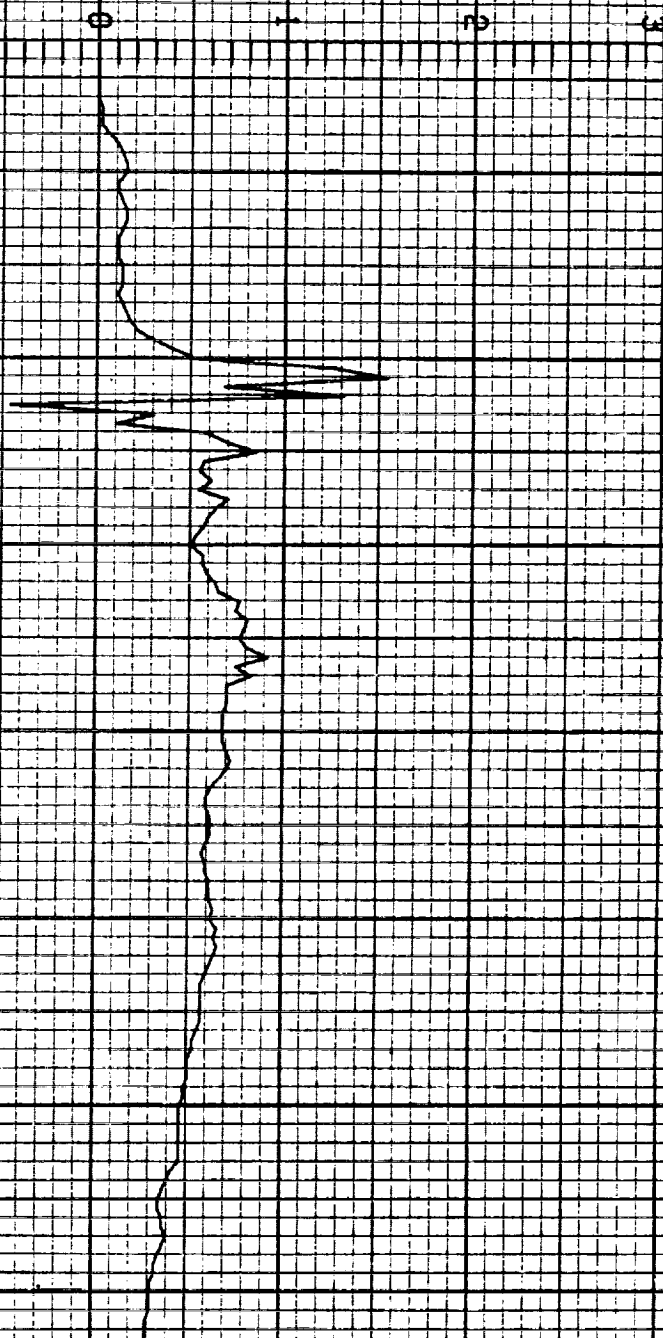
LEC2 RUN NO. 6

5.006

D_1 A/m²

21:28:57.9
CHANNEL NO. 2.0

MICROSECONDS



1034

ORIGINAL PAGE IS
OF POOR QUALITY

-106 LIGHTNING/ 84-043

1 FC 2 RUN NO. 6

5.006

I A/s

21:28:57.9
CHANNEL NO. 2.1

MICROSECONDS

24 x 10¹⁰

F-106 LIGHTNING/ 84-043

1 FC2 RUN NO. 6

3.008

\bar{D}_1 τ/s

21:28:57.9
CHANNEL NO. 2.2

MICROSECONDS



ORIGINAL PAGE IS
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F-105 LIGHTNING/ 84-043

LEC4 RUN NO. 6

5.006

TP 100

V V

21:28:57.9
CHANNEL NO. 4.0

MICROSECONDS

1037

F-106 LIGHTNING/ 84-043

LECH RIN NO. 6

TP 101

3.006

V_{fb} V

30 20 10 0 -10 -20 -30

.8

.9

1.0

MICROSECONDS

1.2

1.3

1.4

1.5

21:28:57.9
CHANNEL NO. #1



1038

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-043

1 EC# RUN NO. 6

6.006

TP123 A

21:28:37.9
CHANNEL NO. 4.2

MICROSECONDS

F-106 LIGHTNING/ 84-044

LEC 1 RUN NO. 1

5.001

I_r

A

-1.8

-1.6

-1.4

-1.2

-1.0

-0.8

-0.6

10×10^3

-0.8

0

0.8

1.6

2.4

3.2

4.0

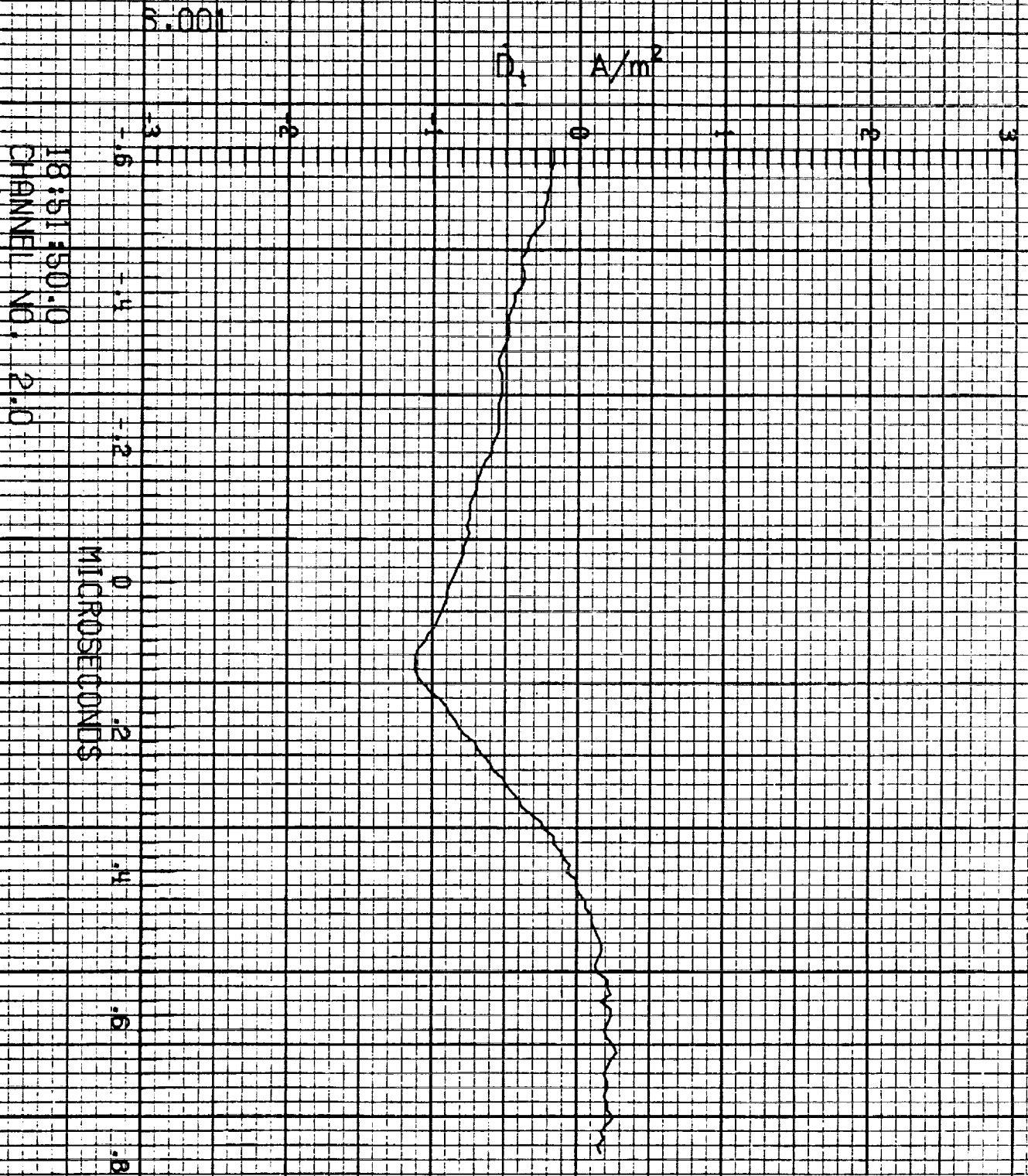
18:51:50.0
CHANNEL NO. 1.1

MICROSECONDS

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-044

LEC 2 RUN NO. 1



F-106 LIGHTNING/ 84-044

REC 2 RUN NO. 1

5.001

$\frac{1}{t}$ A/s

24 X 10¹⁰

18:51:50.0
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
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F=106 LIGHTNING/ 84-044

LEC 4 RUN NO. 1

TP 100

V_w V

3.001

18:51:50.0
CHANNEL NO. 4.0

MICROSECONDS

1043

F-106 LIGHTNING/ 84-044

1 FC4 RUN NO. 1

3.001

TP 101

V_{no} V

-30 -20 -10 0 10 20 30

-.9

-.8

-.7

-.6

-.5

-.4

-.3

-.2

18:51:50.0

CHANNEL NO. #.1

MICROSECONDS

1044

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-044

LEC 1 RUN NO. 2

5.003

I_n A

19:03:40.8
CHANNEL NO. 1.1

MICROSECONDS



1045

F-106 LIGHTNING/ 84-044

1 FC 1 RUN NO. 2

8.008

T_t

A

18 x 10³

19:03:40.6
CHANNEL NO. 1.2

MICROSECONDS

ORIGINAL PAGE IS
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F-108 LIGHTNING/ 84-044

1 EC2 RUN NO. 2

8.008

D_1 A/m²

19:03:40.8
CHANNEL NO. 2.0

MICROSECONDS

F-106 LIGHTNING/ 84-044

1 FC2 RUN NO. 2

8.008

i A/s

24 x 10¹⁰

19:08:40.6
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-044

IFC2 RUN NO. 2

6.008

B₁ T/s

1800

1200

600

0

600

1200

1800

-.4

-.2

0

.2

.4

.6

.8

1.0

19:03:40.6
CHANNEL NO. 2.2

MICROSECONDS

1049

F-106 LIGHTNING/ 84-044

IFC4 RUN NO. 2

8.008

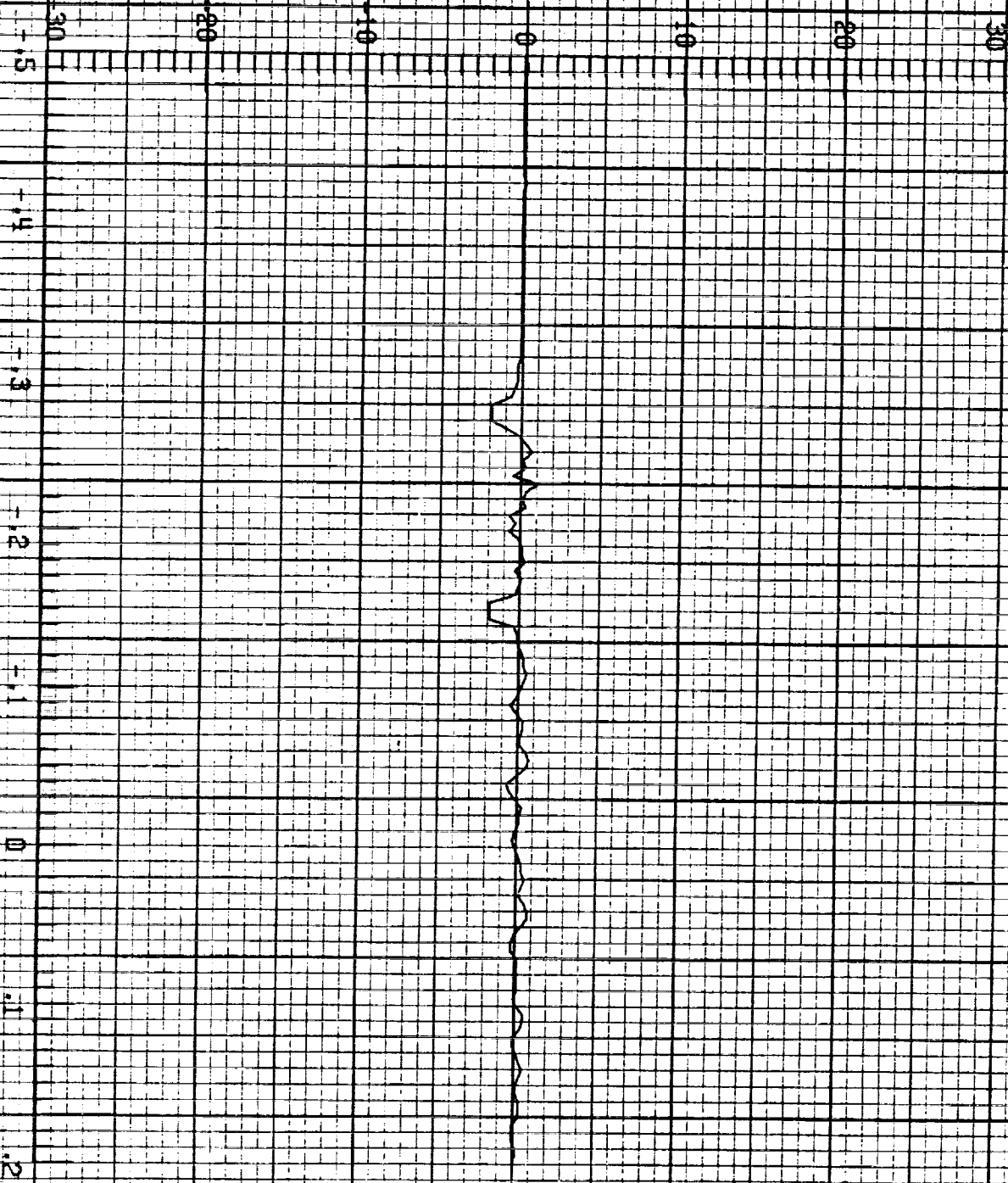
TP 100

V₊ V

19:03:40.6
CHANNEL NO. 4.0

MICROSECONDS

1050



ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-044

LEC 4 RUN NO. 2

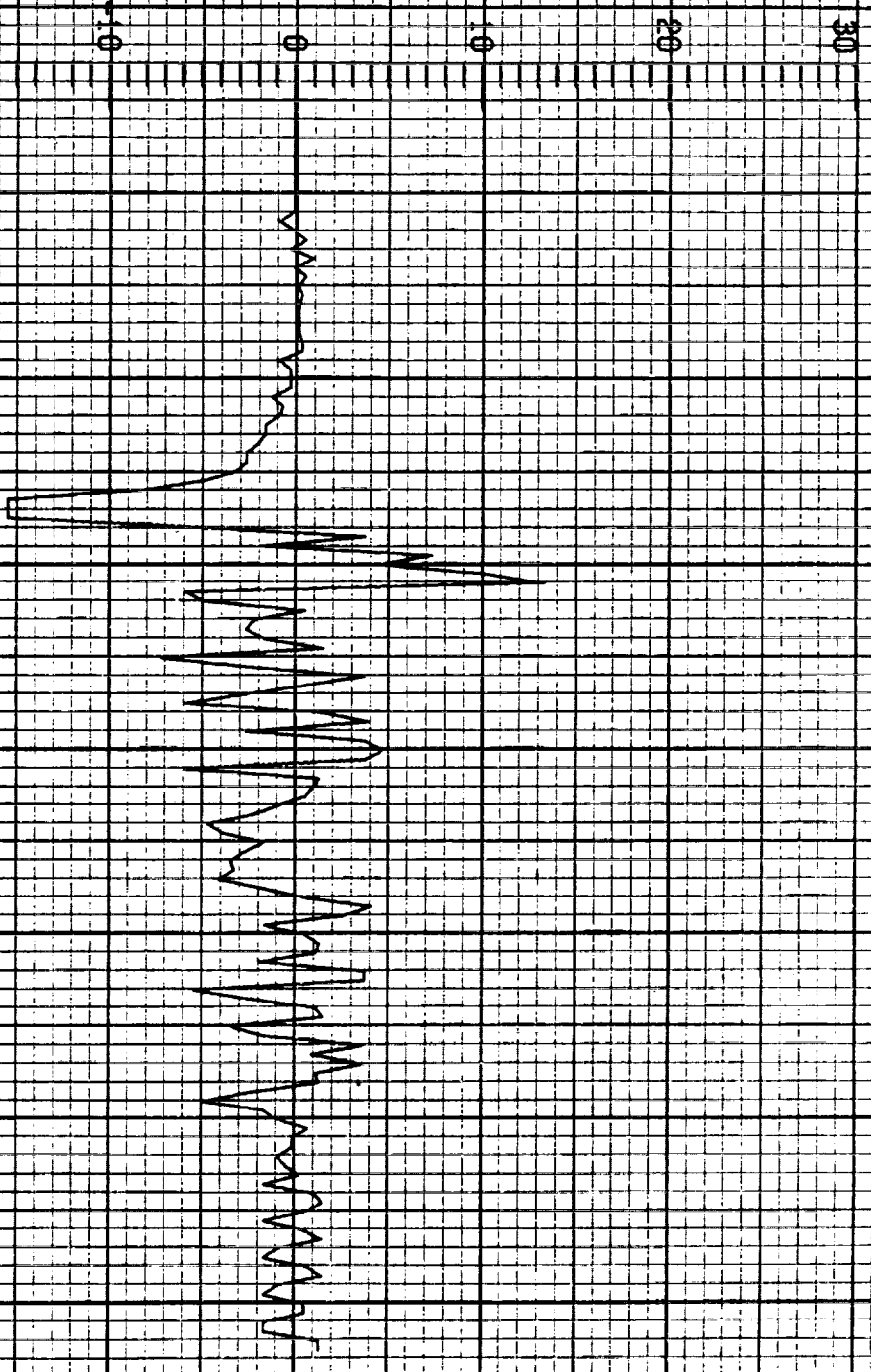
5.008

TP 101

V_{fb} V

19:03:40.6
CHANNEL NO. 41.1

MICROSECONDS



1051

F-106 LIGHTNING/ 84-044

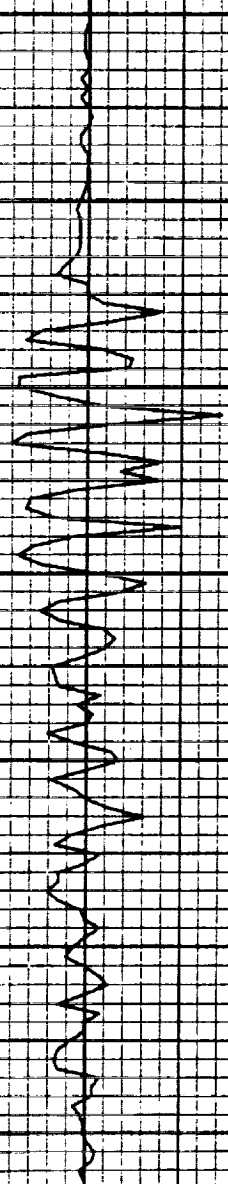
1 EC4 RUN NO. 2

6.003

TP123 A

19:03:40.6
CHANNEL NO. 4.2

MICROSECONDS



ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-044

IFC 1 RUN NO. 3

6.004

I_n A

19:19:08.5
CHANNEL NO. 1.1

MICROSECONDS

1053

F-106 LIGHTNING/ 84-044

LEC1 RUN NO. 3

5.00H

T₁ A

1.8

1.2

0.6

0

0

1.2

1.8 x 10³

0

.8

1.6

2.4

3.2

4.0

4.8

MICROSECONDS

19:19:05.5
CHANNEL NO. 1.2

ORIGINAL PAGE IS
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F=106 LIGHTNING/ 84=D44

LEC2 RUN NO. 3

5.004

D_t A/m²

19:19:05.5
CHANNEL NO. 2.0

MICROSECONDS

1055

F-106 LIGHTNING/ 84-044

REC 2 RUN NO. 3

6.004

\dot{I} A/s

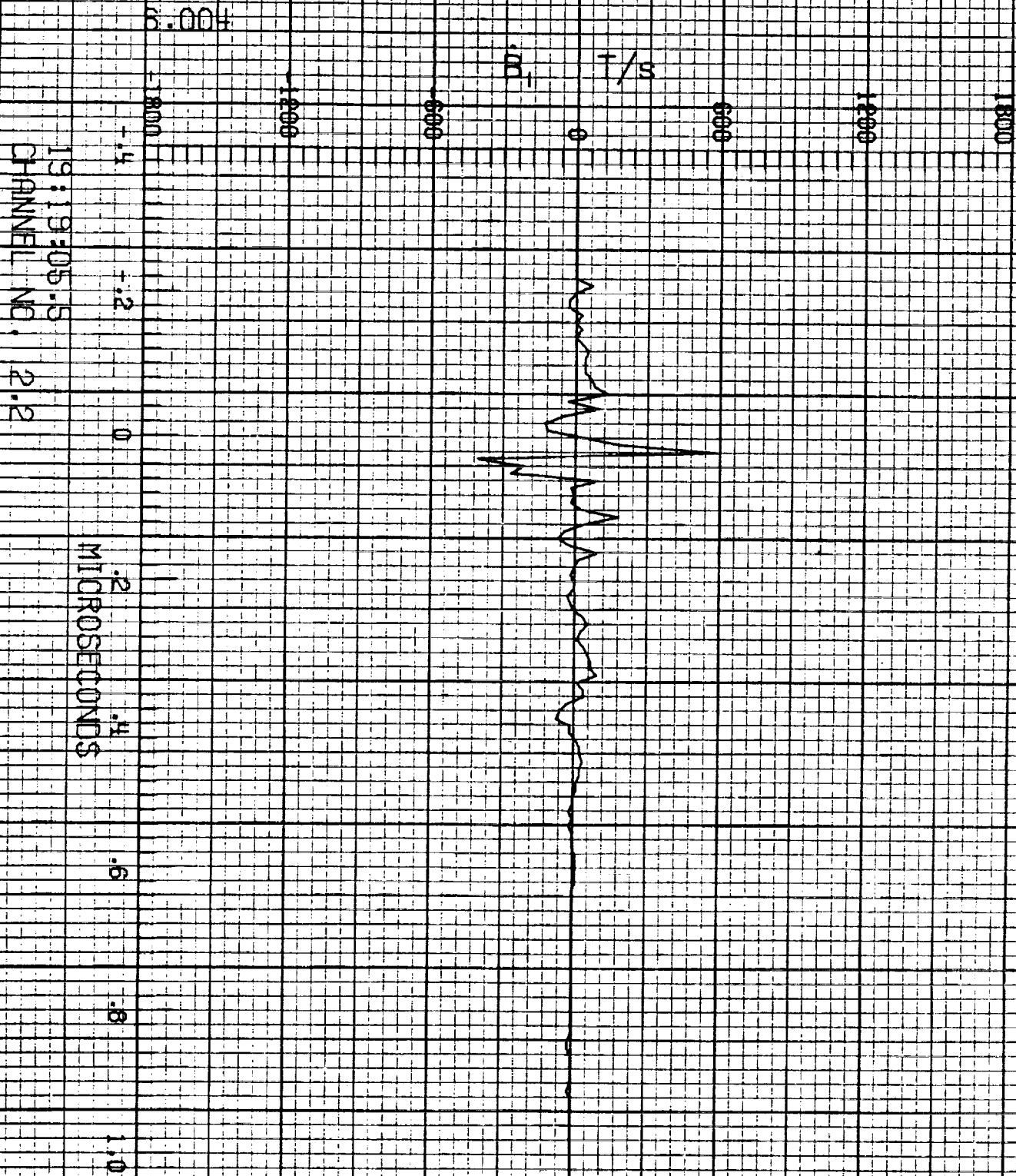


MICROSECONDS

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F-106 LIGHTNING/ 84-044

1 EC2 RUN NO. 3



F-106 LIGHTNING/ 84-044

1 FC 4 RUN NO. 3

8.004

TP 100

V V

19:19:05.5
CHANNEL NO. 4.0

MICROSECONDS

ORIGINAL PAGE IS
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F-106 LIGHTNING/ 84-044

LEC 4 RUN NO. 3

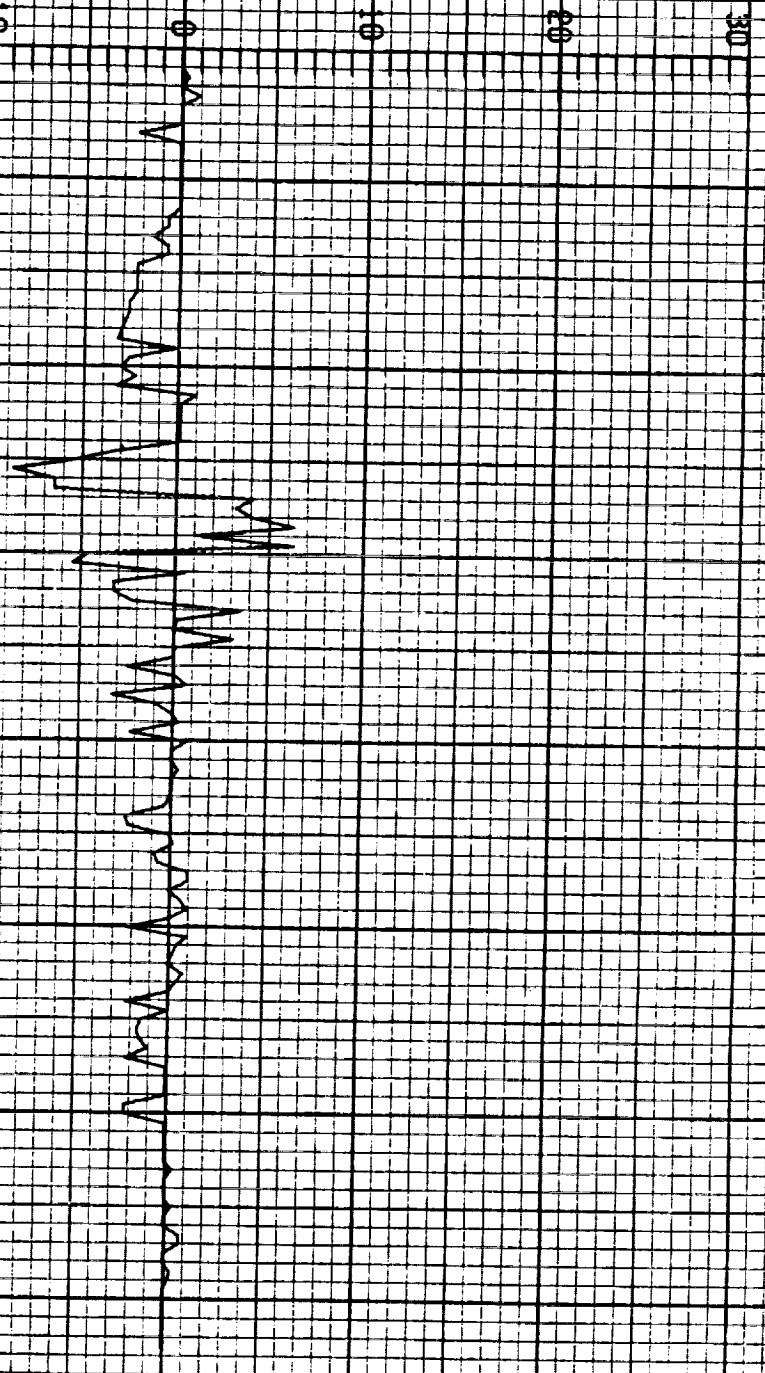
3.004

TP 101

V₁₀ V

19:19:05.5
CHANNEL NO. 4.1

MICROSECONDS



F-106 LIGHTNING/ 84-044

LEC 4 RUN NO. 3

5.004

TP123

A

3 2 1 0 1 2 3

-.5

-.4

-.3

-.2

-.1

0

.1

.2

MICROSECONDS

19:19:05.5

CHANNEL NO. 4.2

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-044

LEC 1 RUN NO. 4

5.006

I_n A

19:23:05.4
CHANNEL NO. 1.1

MICROSECONDS

1061

F-106 LIGHTNING/ 84-044

LEO 1 RUN NO. 4

3.008

I₁ A

19:29:05.4
CHANNEL NO. 1.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-044

LEC 2 RUN NO. 4

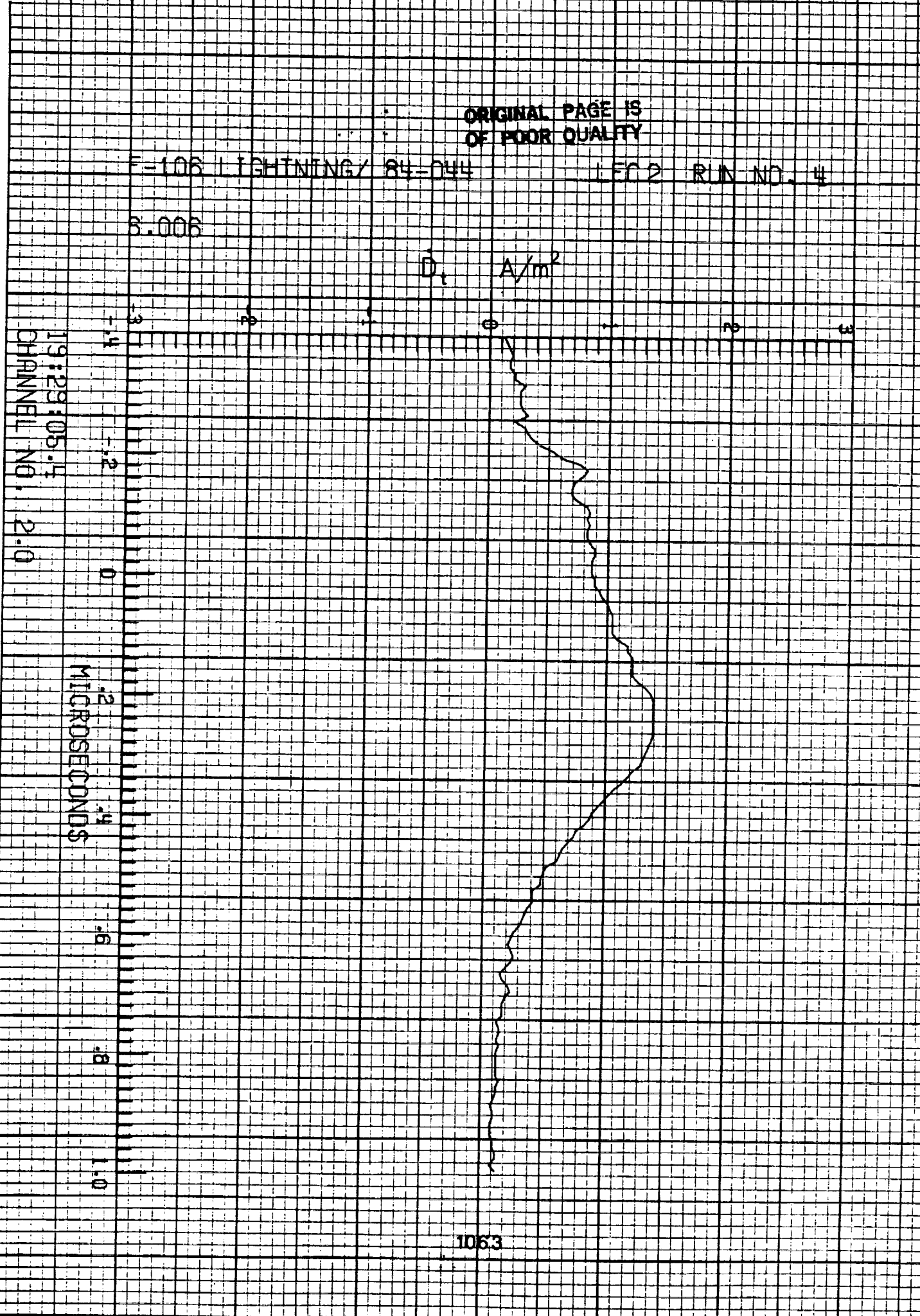
6.006

D_t A/m²

19:29:05.4
CHANNEL NO. 2.0

MICROSECONDS

1063



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-044

LEC 2 RUN NO. 4

6.006

I A/S

19:29:05.4
CHANNEL NO. 2.1

MICROSECONDS

24 x 10¹⁰

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-044

1 FC 2 RUN NO. 4

3.005

\dot{E}_1 T/s

19:29:05.4
CHANNEL NO. 2.2

MICROSECONDS

1065

F-106 LIGHTNING/ 84-044

LECH RIN NO. 4

6.006

TP 100

V_w V

30 20 10 0 10 20 30

19:29:05.4
CHANNEL NO. 4.0

MICROSECONDS

.5
.4
.3
.2
.1
0
.1
.2

1066

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-044

LECH RUN NO. 4

TP 101

6.006

V_{fb} V

19:29:05.4
CHANNEL NO. 4.1

MICROSECONDS

F-106 LIGHTNING/ 84-044

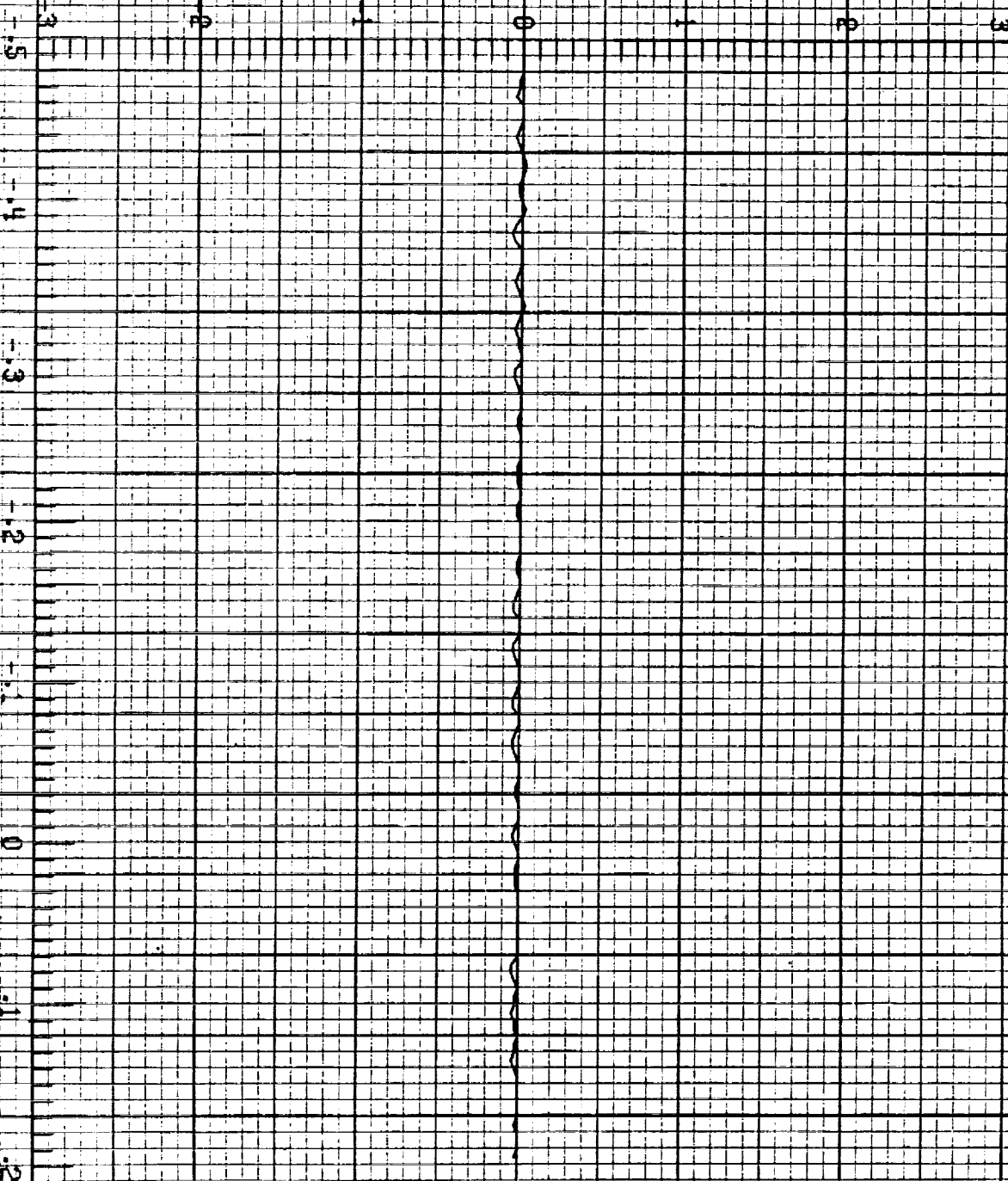
LECH RUN NO. 4

6.006

TP123 A

19:29:05.4
CHANNEL NO. 4.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-045

LFC 1 RUN NO. 1

6.001

I_r A

21:34:49.6
CHANNEL NO. 1.1

MICROSECONDS

1.8
0
.8
1.6
2.4
3.2
4.0
4.8

1.8 X 10³

F-106 LIGHTNING/ 84-045

FC 1 RUN NO. 1

6.001

T₁ A

1.8

1.6

1.4

1.2

1.0

.8

.6

1.8 X 10³

0

.8

MICROSECONDS

2.4

3.2

4.0

4.8

21:34:49.6
CHANNEL NO. 1.2

ORIGINAL PAGE IS
OF POOR QUALITY

E-106 LIGHTNING/ 84-045

FC2 RUN NO. 1

6.001

D_1 A/m²

21:31:49.6
CHANNEL NO. 2.0

MICROSECONDS

F-106 LIGHTNING/ 84-045

1 EC2 RUN NO. 1

3.001

I A/s

24 X 10¹⁰

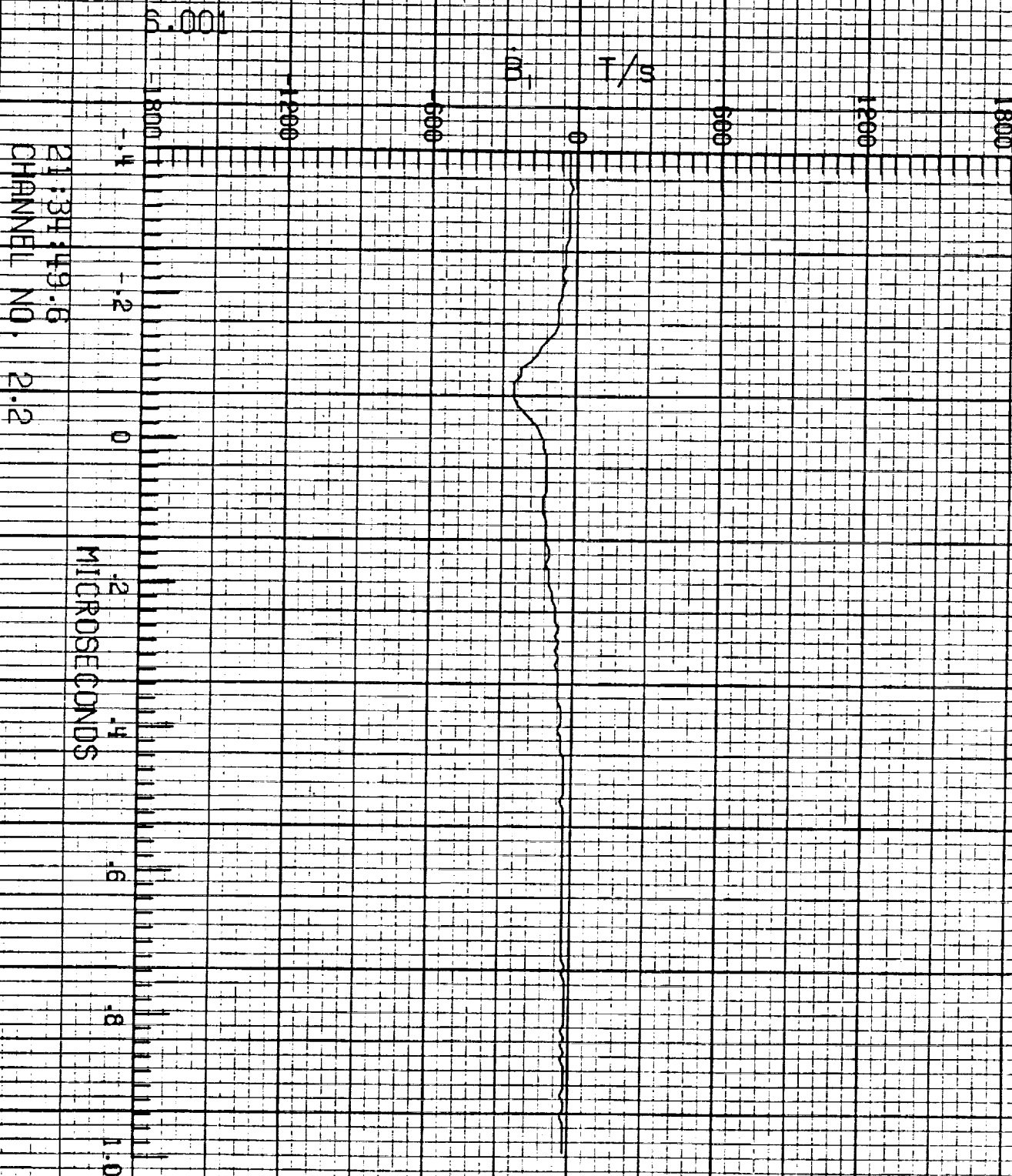
21:34:49.6
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-045

LEC 2 RUN NO. 1



F-106 LIGHTNING/ 84-045

LEC4 RUN NO. 1

6.001

TP 100

V_w V

21:34:49.6
CHANNEL NO. 4.0

MICROSECONDS

1074

ORIGINAL PAGE IS
OF POOR QUALITY

106 LIGHTNING/ 84-045

LEC 4 RUN NO. 1

3.001

TP 101

V₁₀ V

21:34:49.6
CHANNEL NO. 4.1

MICROSECONDS

1075

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-045

LEC 4 RUN NO. 1

S.001

TP123 A

21:34:49.6
CHANNEL NO. 4.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-045

LEC 1 RUN NO. 2

5.002

T_5 A

21:53:25.2
CHANNEL NO. 1.1

MICROSECONDS

-1.8
-1.6
-1.4
-1.2
-1.0
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8

1.8×10^3

1077

F-106 LIGHTNING/ 84-045

LEC1 RUN NO. 2

5.002

I, A

18 12 6 0 6 12 18

10^3

-8

0

-8

1.6

2.4

3.2

4.0

4.8

MICROSECONDS

21:53:25.2

CHANNEL NO. 1.2

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-045

LEC 2 RUN NO. 2

5.002

$D, A/m^2$

21:53:25.2
CHANNEL NO. 2.0

MICROSECONDS

1079

F-105 LIGHTNING/ 84-045

LEC 2 RUN NO. 2

5.002

i A/s

24 x 10¹⁰

24

16

8

0

0

16

2

0

2

4

6

8

1.0

MICROSECONDS

21:53:25.2

CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-045

LEC 2 RUN NO. 2

5.002

B_1 T/s

21:53:25.2
CHANNEL NO. 2.2

MICROSECONDS

1081

F-106 LIGHTNING/ 84-D45

LEC 4 RUN NO. 2

5.002

TP 100

V_w V

21:53:25.2
CHANNEL NO. 4.0

MICROSECONDS

1082

C-2

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

106105 1100H NCIN 164-845 J15

LED EC 2117000 N2 2

050002

TP 190101

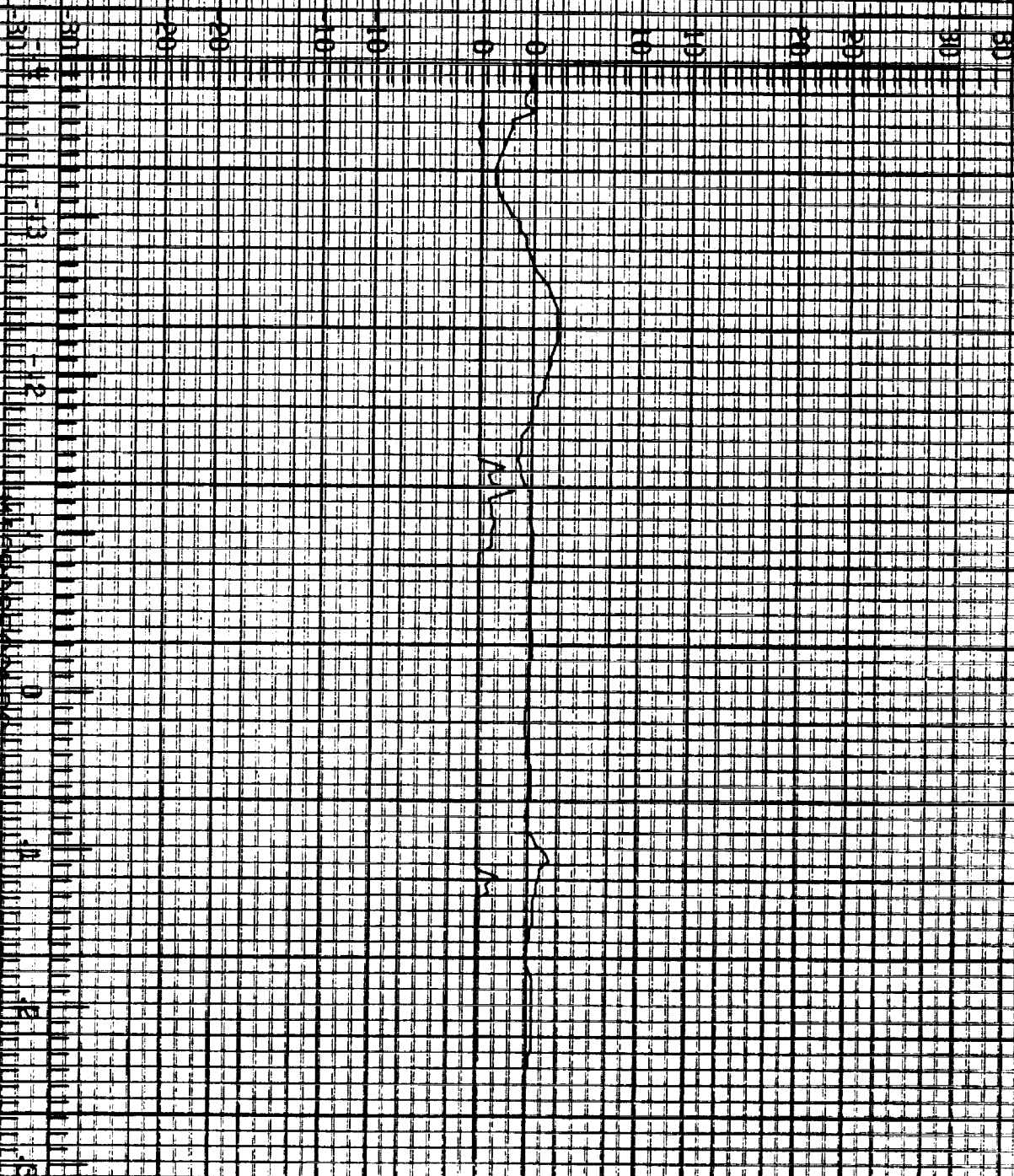
V_w V_{10} V V

CHANNEL NO. 4.0

CHANNEL NO. 4.1

MICROSECONDS

MICROSECONDS



1082083

F-105 LIGHTNING/ 84-045

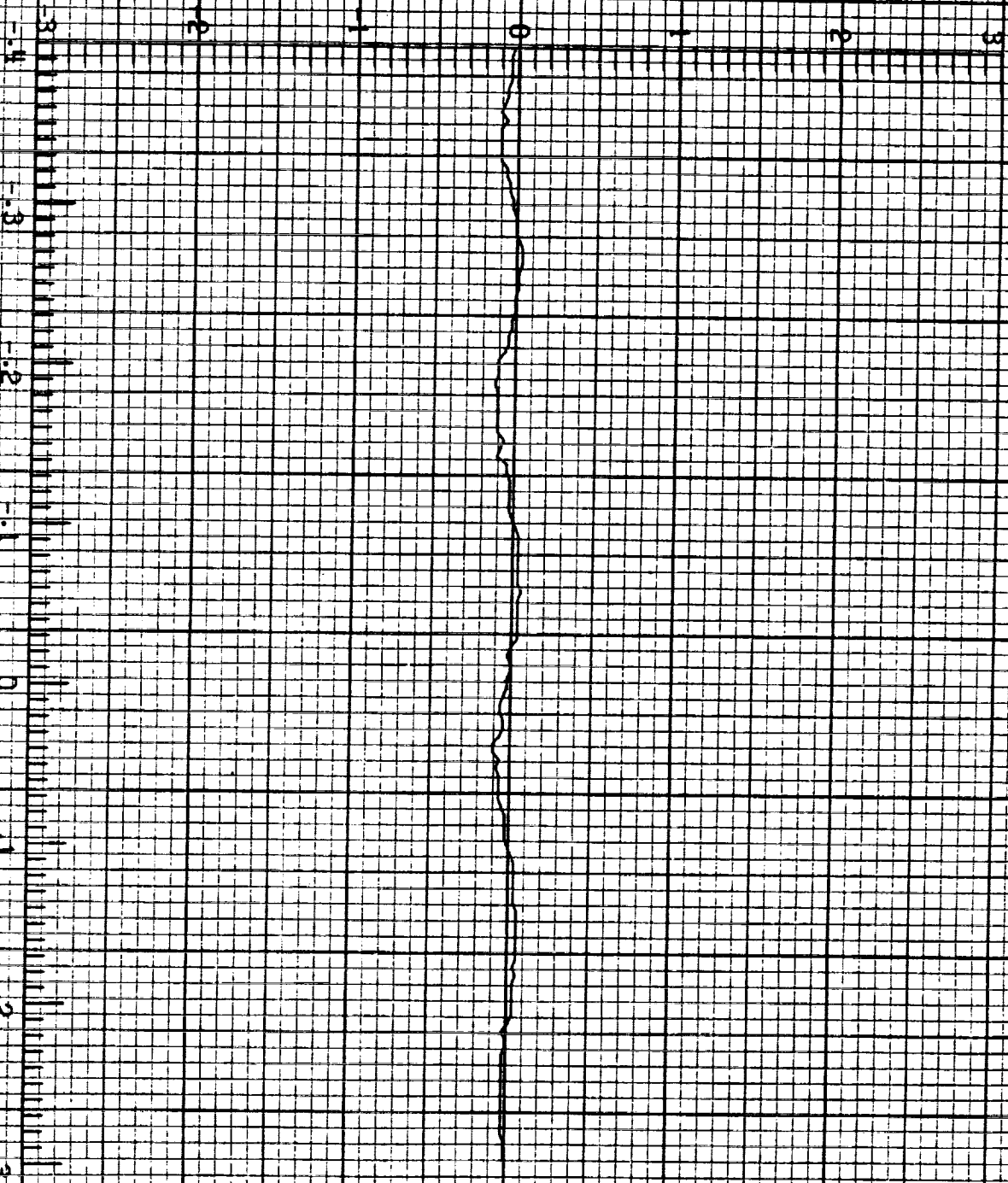
LEC 4 RUN NO. 2

5.002

TP123 A

21:53:25.2
CHANNEL NO. 4.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

E-105 LIGHTNING/ 84-D45

LEC 1 RUN NO. 3

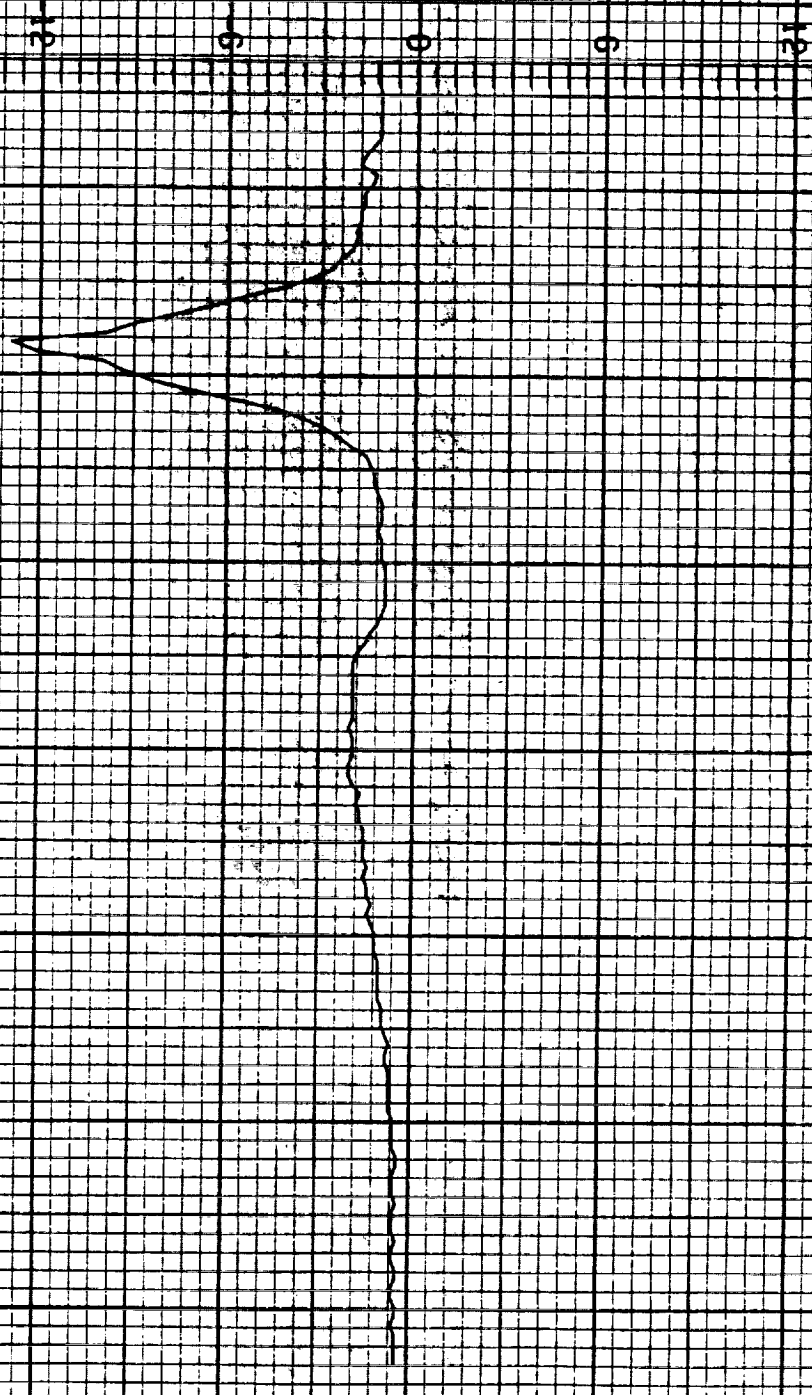
5.003

I_n A

22:29:02.2
CHANNEL NO. 1.1

MICROSECONDS

0 .8 1.6 2.4 3.2 4.0 4.8



F-105 LIGHTNING/ 84-045

LEC 1 RUN NO. 3

0.003

I₁ A

18 x 10³

-0.8

-1.2

0

0

0

0

22:29:02.2

CHANNEL NO. 1.2

0

0.8

1.6

2.4

3.2

4.0

4.8

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-105 LIGHTNING/ 84-045

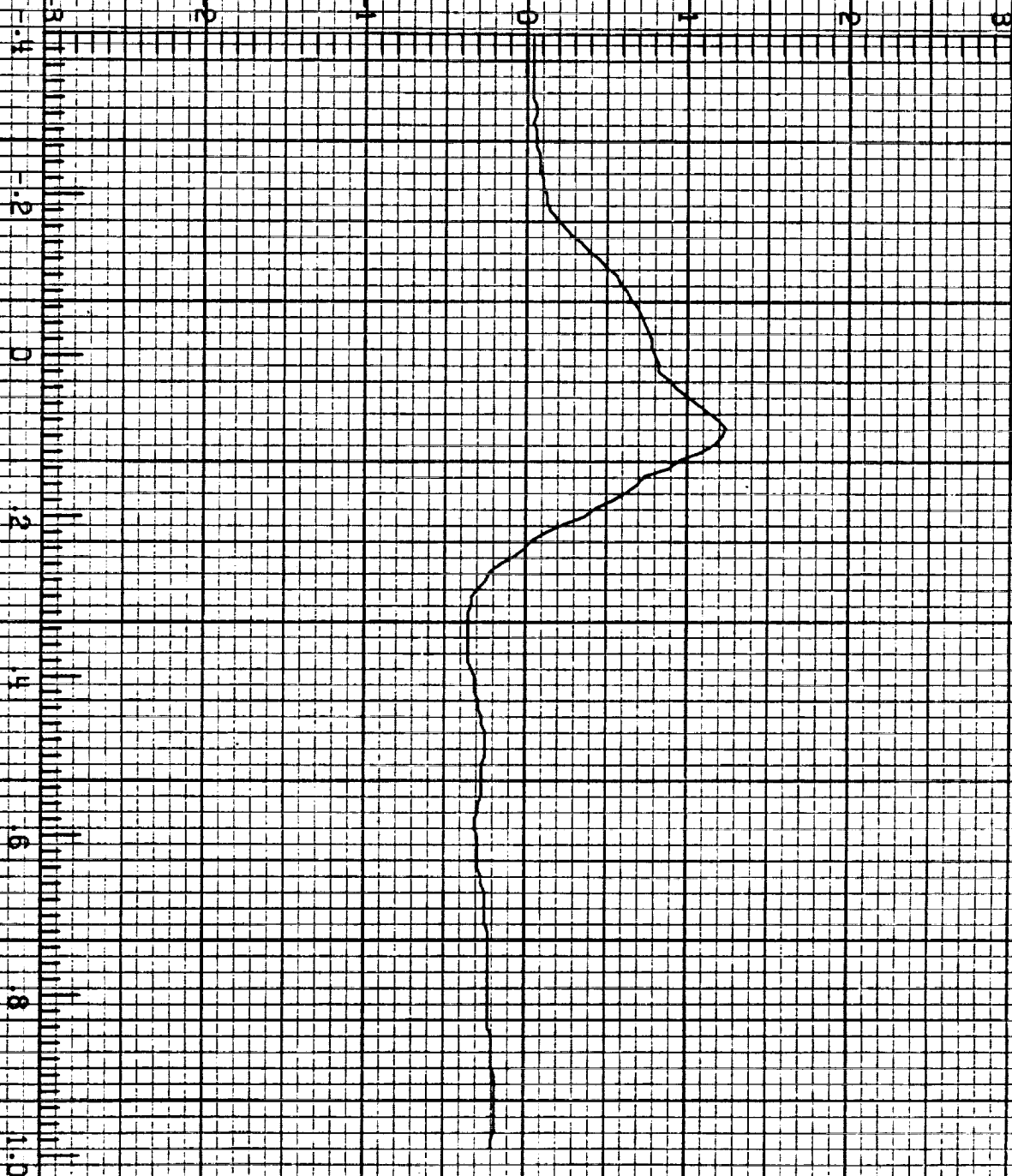
LEC 2 RUN NO. 3

5-003

D_t A/m²

22:29:02.2
CHANNEL NO. 2.0

MICROSECONDS



1087

F-105 LIGHTNING/ 84-045

LEC 2 RUN NO. 3

6.003

i A/s

24 X 10¹³

24

16

8

0

0

0

0.2

0

2

4

6

8

10.0

MICROSECONDS

22:29:02.2

CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-045

LEC 2 RUN NO. 3

5.003

$\frac{V}{T/s}$

22:29:02.2
CHANNEL NO. 2.2

MICROSECONDS

1089

F-105 LIGHTNING/ 84-045

LECH RUN NO. 3

5.003

TP 100

V_w V

22:29:02.2
CHANNEL NO. 4.0

MICROSECONDS

1090

ORIGINAL PAGE 13
OF POOR QUALITY

F-105 LIGHTNING/ 84-045

LEC 4 RUN NO. 3

6.003

TP 101

V_{1b} V

22:29:02.2
CHANNEL NO. 4.1

MICROSECONDS

1091

106 LIGHTNING/ 84-045

LEC 4 RUN NO. 3

5.003

TP123

A

22:29:02.2
CHANNEL NO. 4.2

MICROSECONDS

1092

ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-046

1 EC 1 RUN NO. 1

3.001

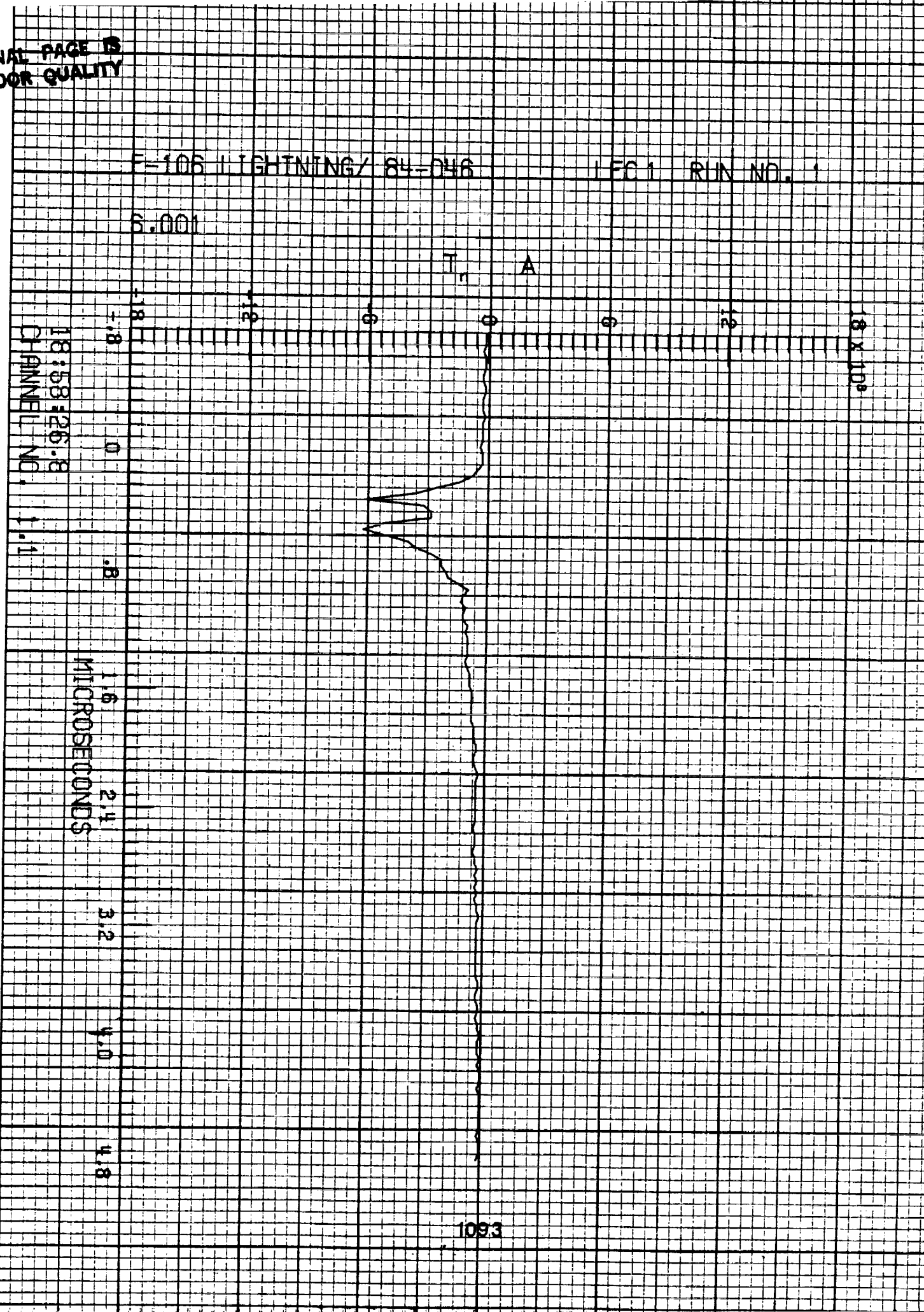
T_n A

18:58:26.8
CHANNEL NO. 1.1

MICROSECONDS

10 x 10³

1093



F-106 LIGHTNING/ 84-046

1 FC 1 RUN NO. 1

6.001

T₁ A

-1.8
-1.6
-1.4
-1.2
-1.0
-0.8
-0.6
-0.4
-0.2
0

1.0

1.0

1.0

1.0

1.0

1.0 x 10³

18:58:26.8
CHANNEL NO. 1.2

MICROSECONDS

.8

1.6

2.4

3.2

4.0

4.8

1094

ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-046

1 FC2 RUN NO. 1

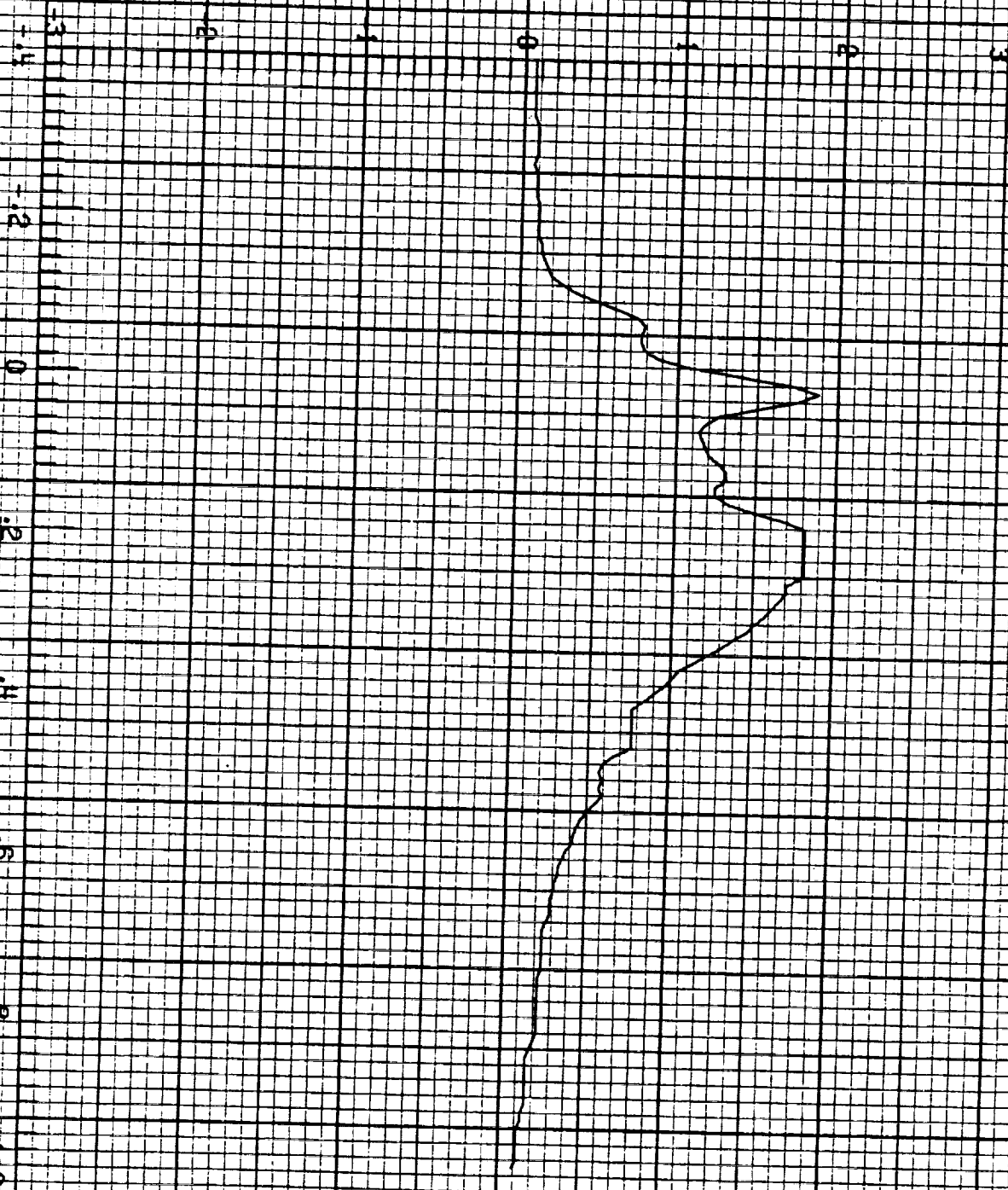
S.001

D_t A/m²

18:58:26.8
CHANNEL NO. 2.C

MICROSECONDS

1095



F-106 LIGHTNING/ 84-046

1 FC 2 RUN NO. 1

3.001

\hat{B}_1 T/s

-1800

-1200

-600

600

1200

1800

-.4

-.2

0

.2

.4

.6

.8

1.0

18:53:26.8
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-046

IFC 2 RUN NO. 1

3.001

\dot{I} A/s

24×10^{10}

18:58:26.8
CHANNEL NO. 2.2

MICROSECONDS

F-106 LIGHTNING/ 84-046

LEC3 RUN NO. 1

5.001

\bar{D}_{wr} A/m²

-24 -16 -8 0 8 16 24

-.4

-.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

18:58:26.8
CHANNEL NO. 3.0

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-046

LEC 3 RUN NO. 1

5.001

D_{eff}

A/m^2

18:58:26.8
CHANNEL NO. 3.1

MICROSECONDS

1099

F-106 LIGHTNING/ 84-046

FC-4 RUN NO. 1

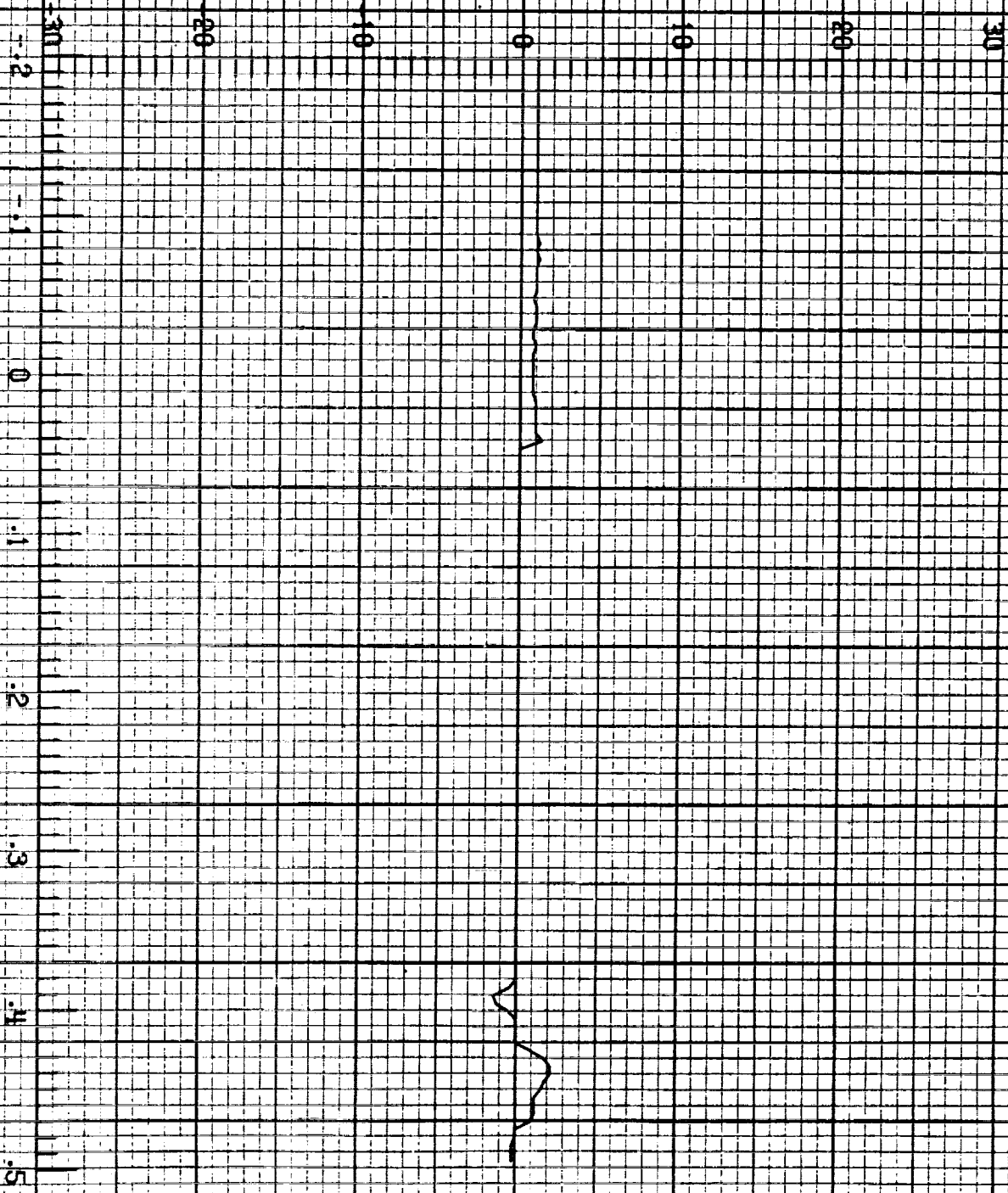
6.001

TP 100

V₊ V

18:58:26.8
CHANNEL NO. 4.0

MICROSECONDS



1100

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-046

LEC 4 RUN NO. 1

6.001

TP 101

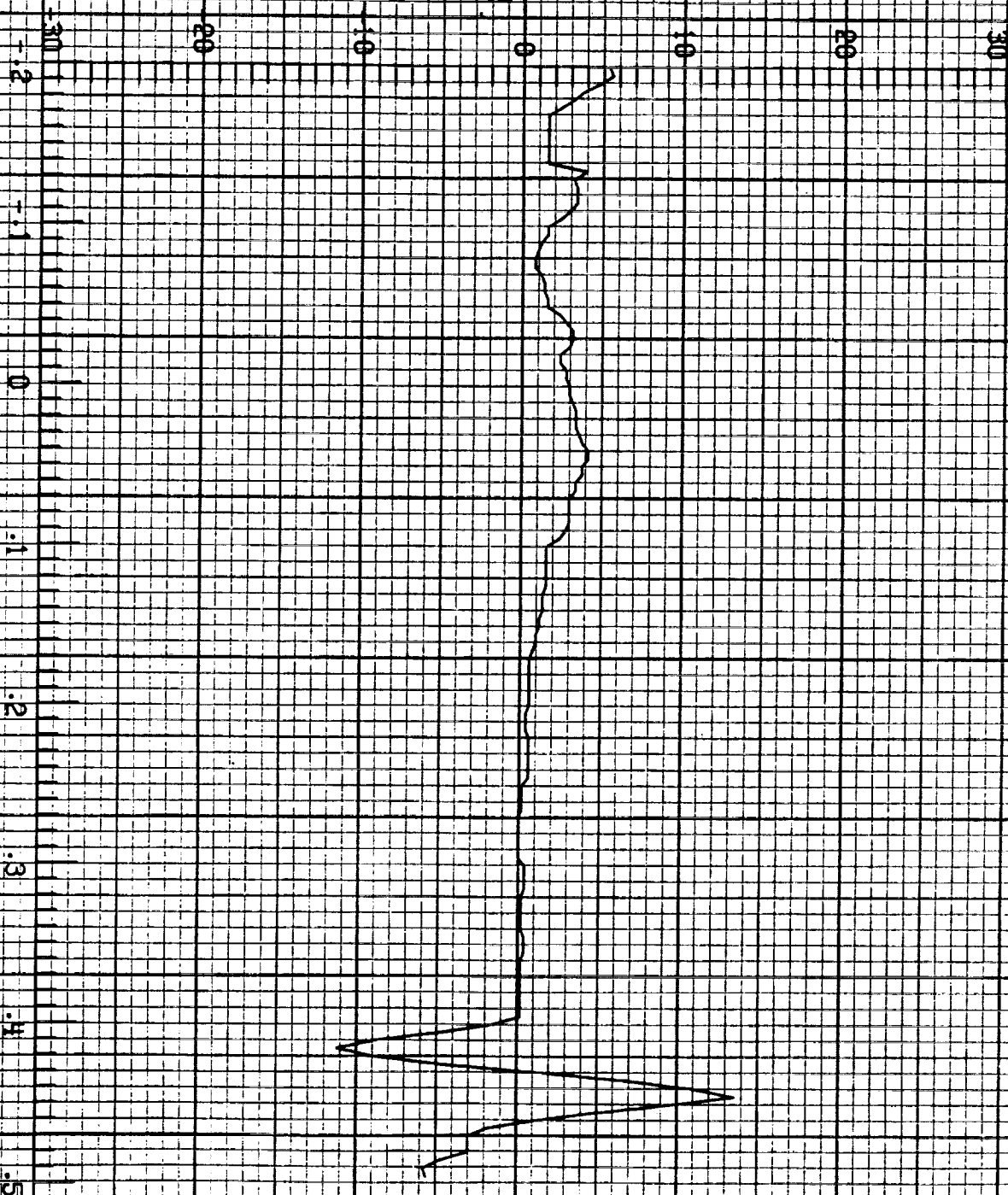
V_{fb}

V

18:58:26.8
CHANNEL NO. 4.1

MICROSECONDS

1101



F-106 LIGHTNING/ 84-046

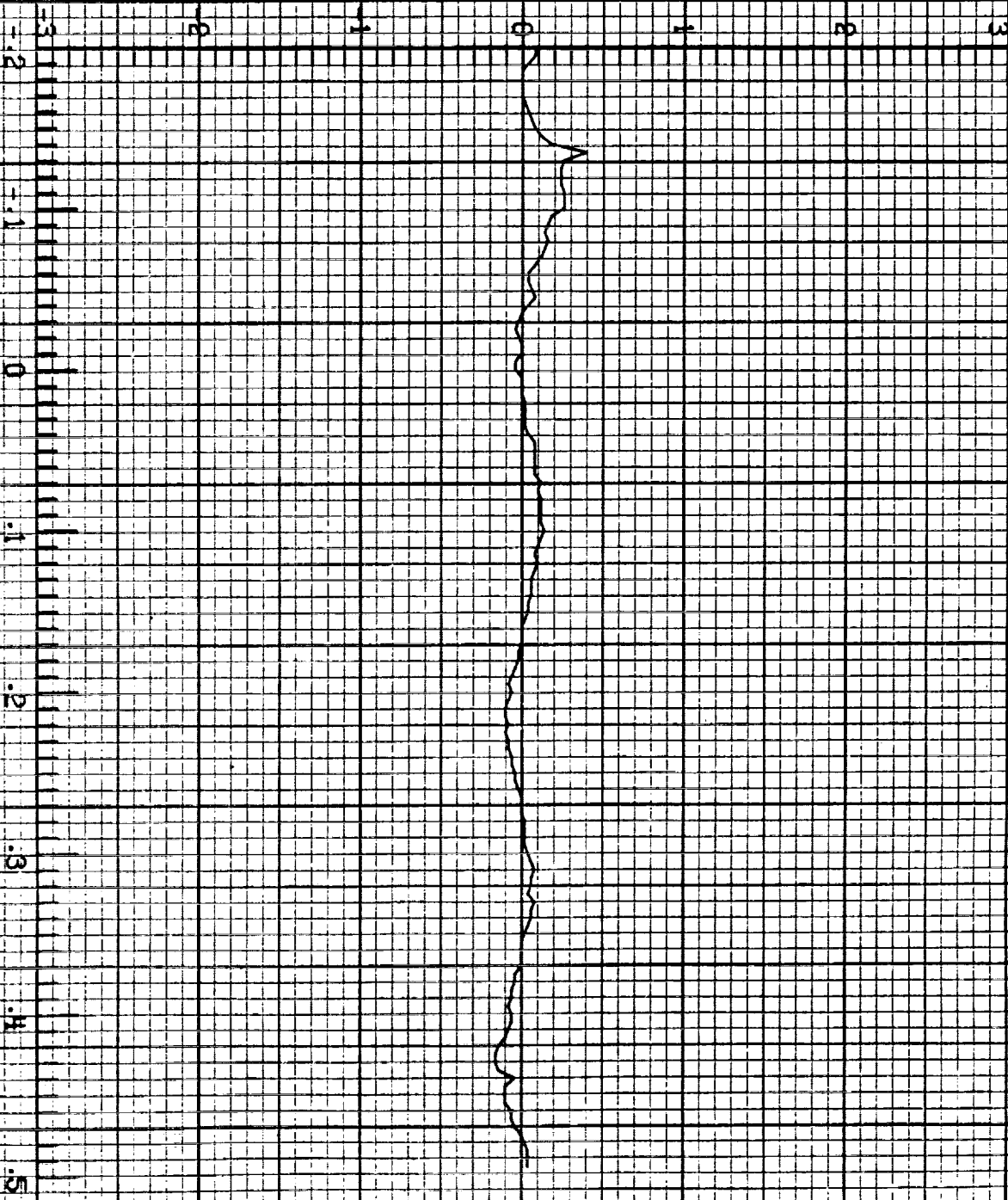
LEC 4 RUN NO. 1

6.001

TP123 A

18:58:26.8
CHANNEL NO. 4.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-DH6

1 FC1 RUN NO. 2

5.002

I_n A

19:45:41.4
CHANNEL NO. 11.1

MICROSECONDS

1103

F-106 LIGHTNING/ 84-046

IFC1 RUN NO. 2

5.002

I_t A

19:45:41.4
CHANNEL NO. 1.2

MICROSECONDS

18
0
.8
1.6
2.4
3.2
4.0
4.8

18 x 10⁹

1104

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-046

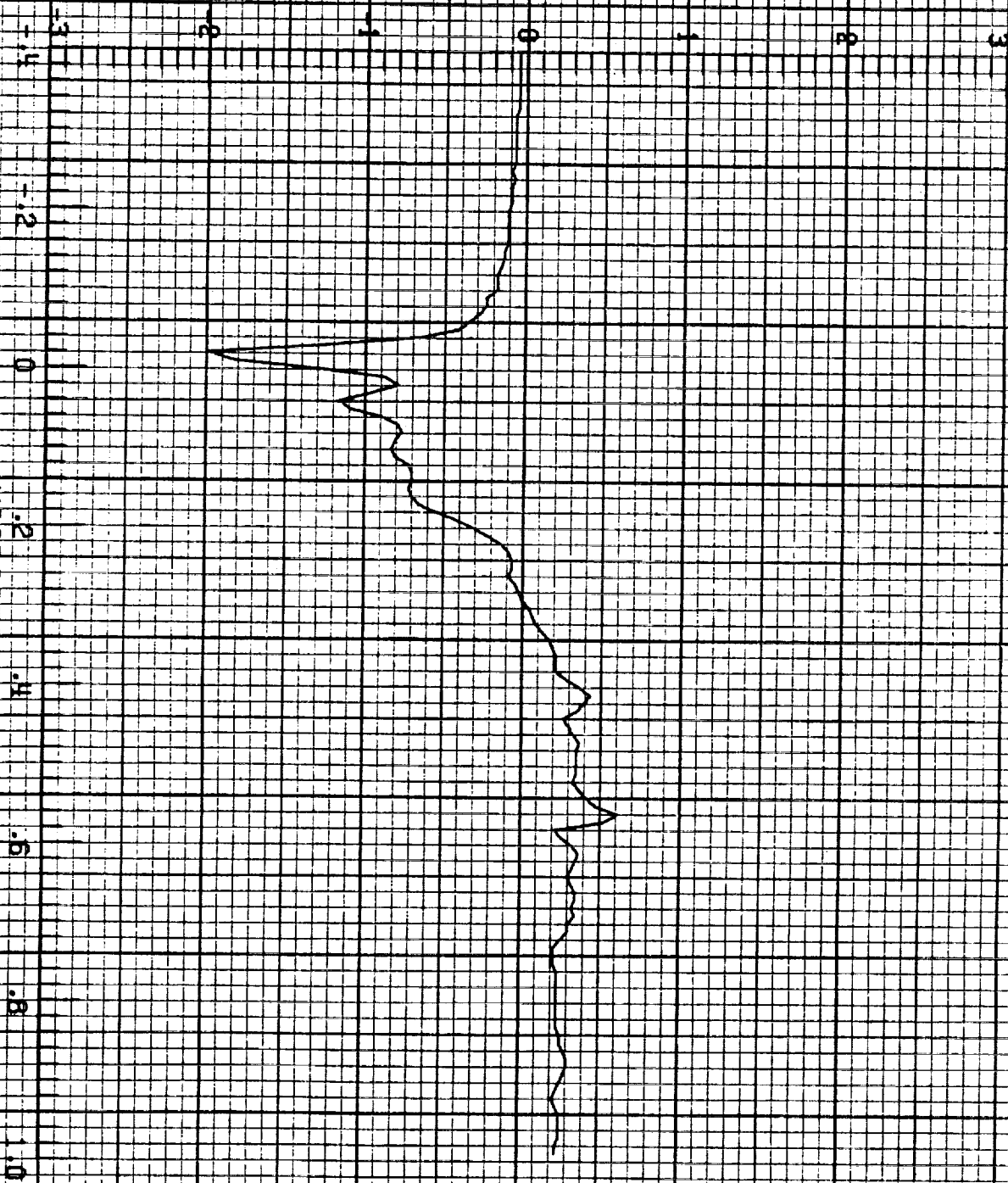
1 EC2 RUN NO. 2

6.002

D_1 A/m²

19:45:41.4
CHANNEL NO. 2.C

MICROSECONDS



F-106 LIGHTNING/ 84-046

1 EC 2 RUN NO. 2

2.002

\bar{S}_1 \bar{T}/s

1800 1600 1400 1200 1000 800 600 400 200 0

-4

-2

0

.2

.4

.6

.8

1.0

MICROSECONDS

19:45:41.4
CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-046

LEC 2 RUN NO. 2

6.002

\dot{I} A/s

19:45:41.4
CHANNEL NO. 2.2

MICROSECONDS

25×10^{14}

F-106 LIGHTNING/ 84-046

FC3 RUN NO. 2

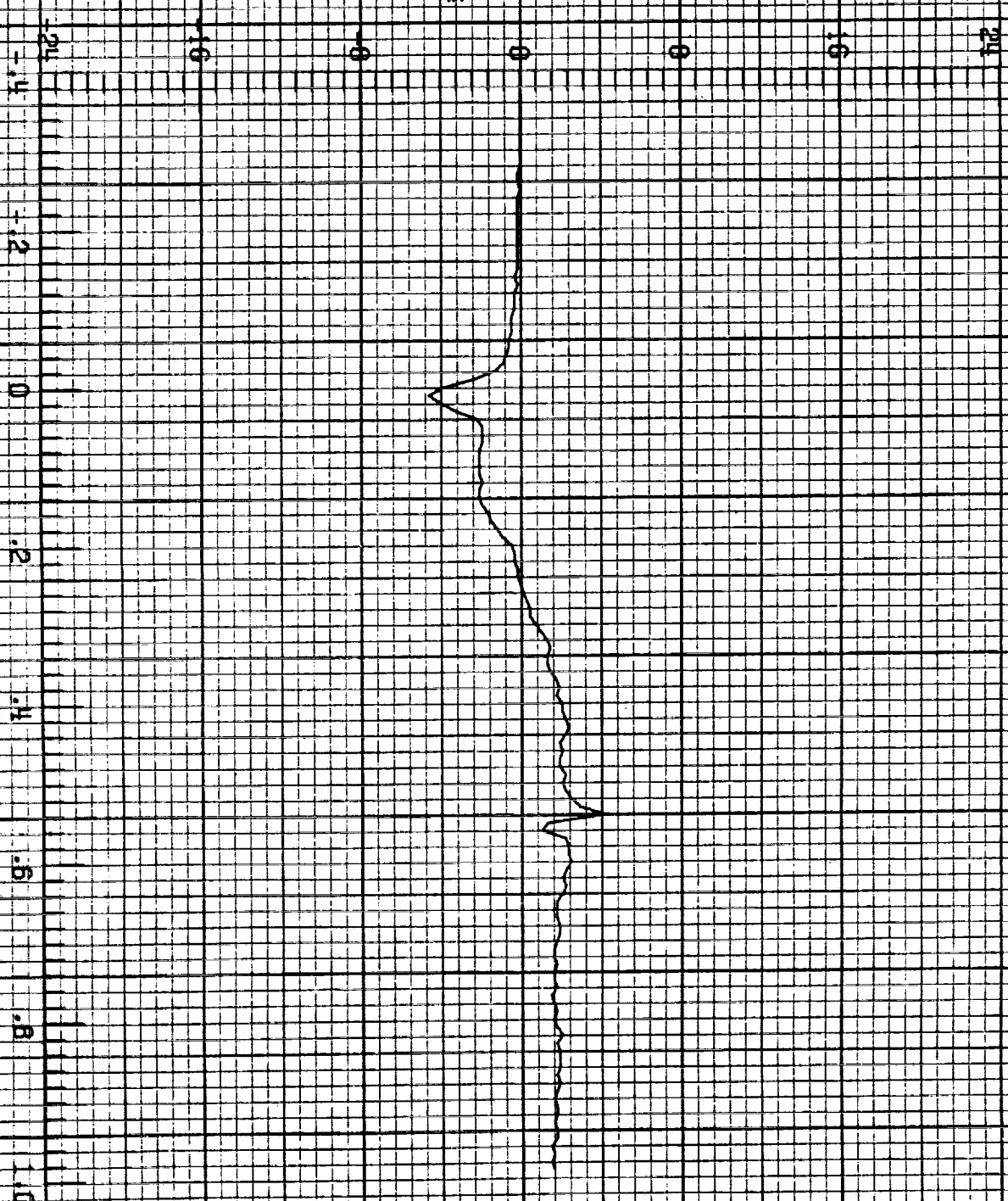
6.002

\hat{D}_{wr} A/m²

18:45:41.4
CHANNEL NO. 3.0

MICROSECONDS

1108



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-046

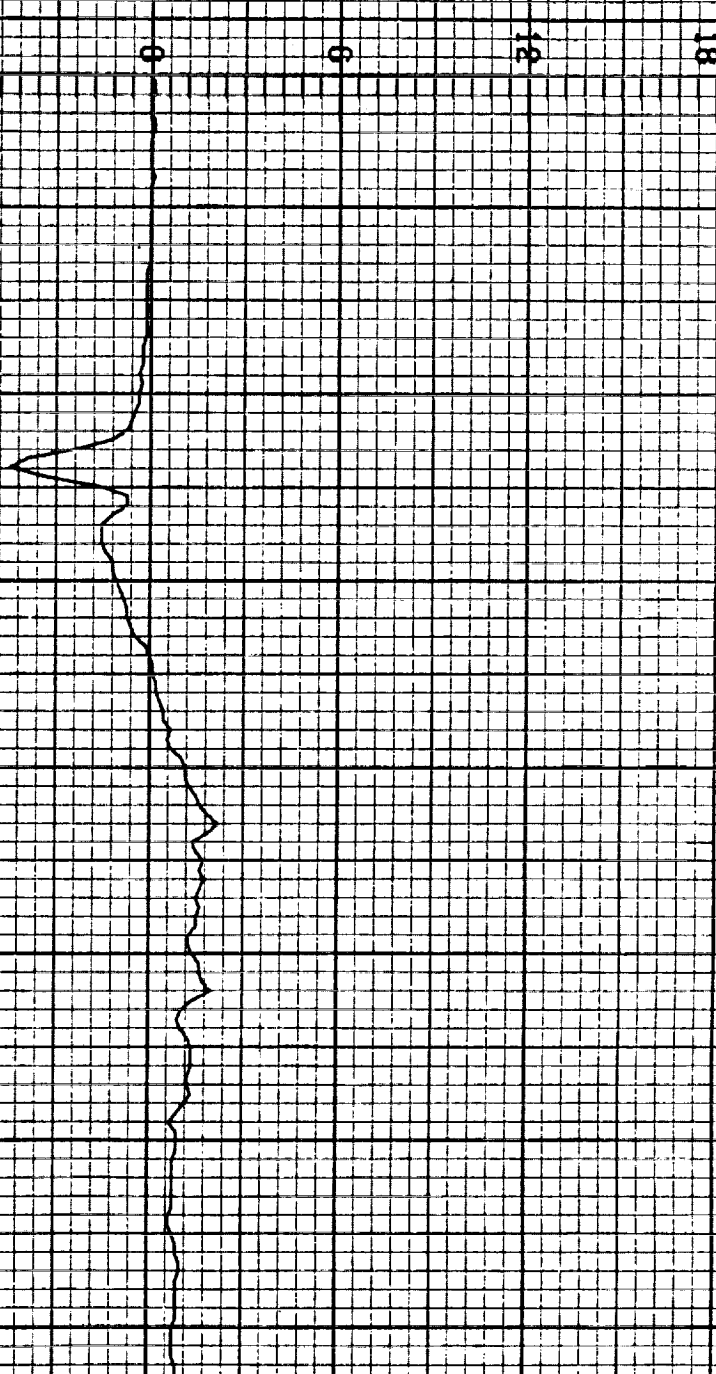
LFC 3 RUN NO. 2

5.002

\dot{D}_{w1} A/m^2

1945:41.4
CHANNEL NO. 3.1

MICROSECONDS



F-106 LIGHTNING/ 84-046

1 FC 4 RUN NO. 2

TP 100

3.002

V₊ V

19:45:41.1
CHANNEL NO. 1
#1.0

MICROSECONDS

1100



ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-046

1 FC4 RUN NO. 2

TP 101

5.002

V_{fb} V

19:45:41.1
CHANNEL NO. 4.1

MICROSECONDS

1101

-106 LIGHTNING/ 84-046

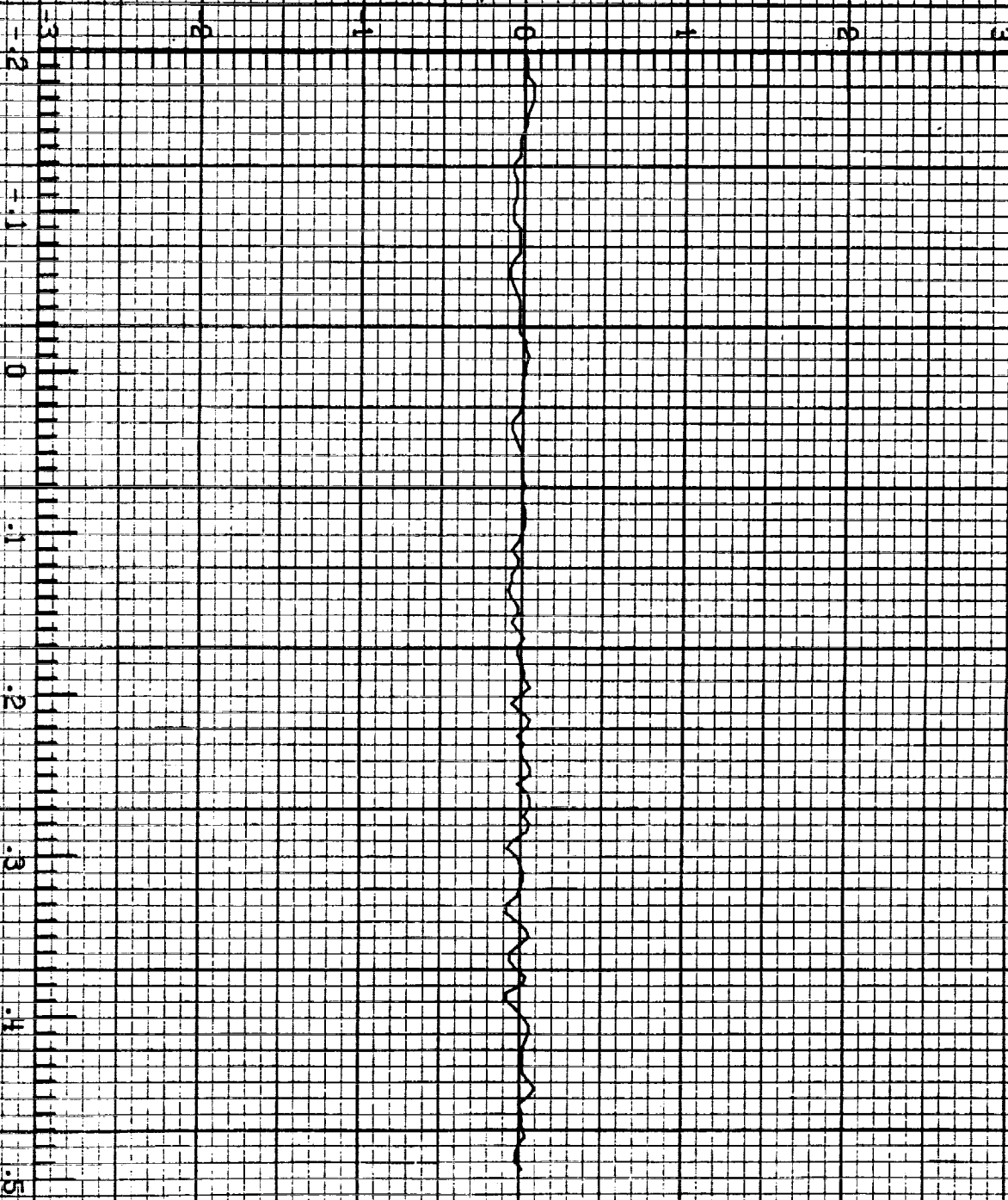
LEC 4 RUN NO. 2

6.002

TP123 A

19:45:41.1
CHANNEL NO. 4.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-047

IFC 1 RUN NO. 1

5.0001

I, A

19:38:06.0
CHANNEL NO. 1.1

MICROSECONDS

F-106 LIGHTNING/ 84-047

LEC 1 RUN NO. 1

5.001

T_r A

10×10^3

-18

-12

-6

0

6

12

0

.8

1.6

2.4

3.2

4.0

4.8

MICROSECONDS

19:38:06.0

CHANNEL NC, 1.2

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

LEC 2 RUN NO. 1

5.001

D_t A/m²

19:38:06.0
CHANNEL NO. 2.0

MICROSECONDS

F-106 LIGHTNING/ 84-047

1 FC 2 RUN NO. 1

5.001

\dot{B}_1 T/s

1800 1200 600 0 600 1200 1800

-.4

-.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

19:38:06.0
CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

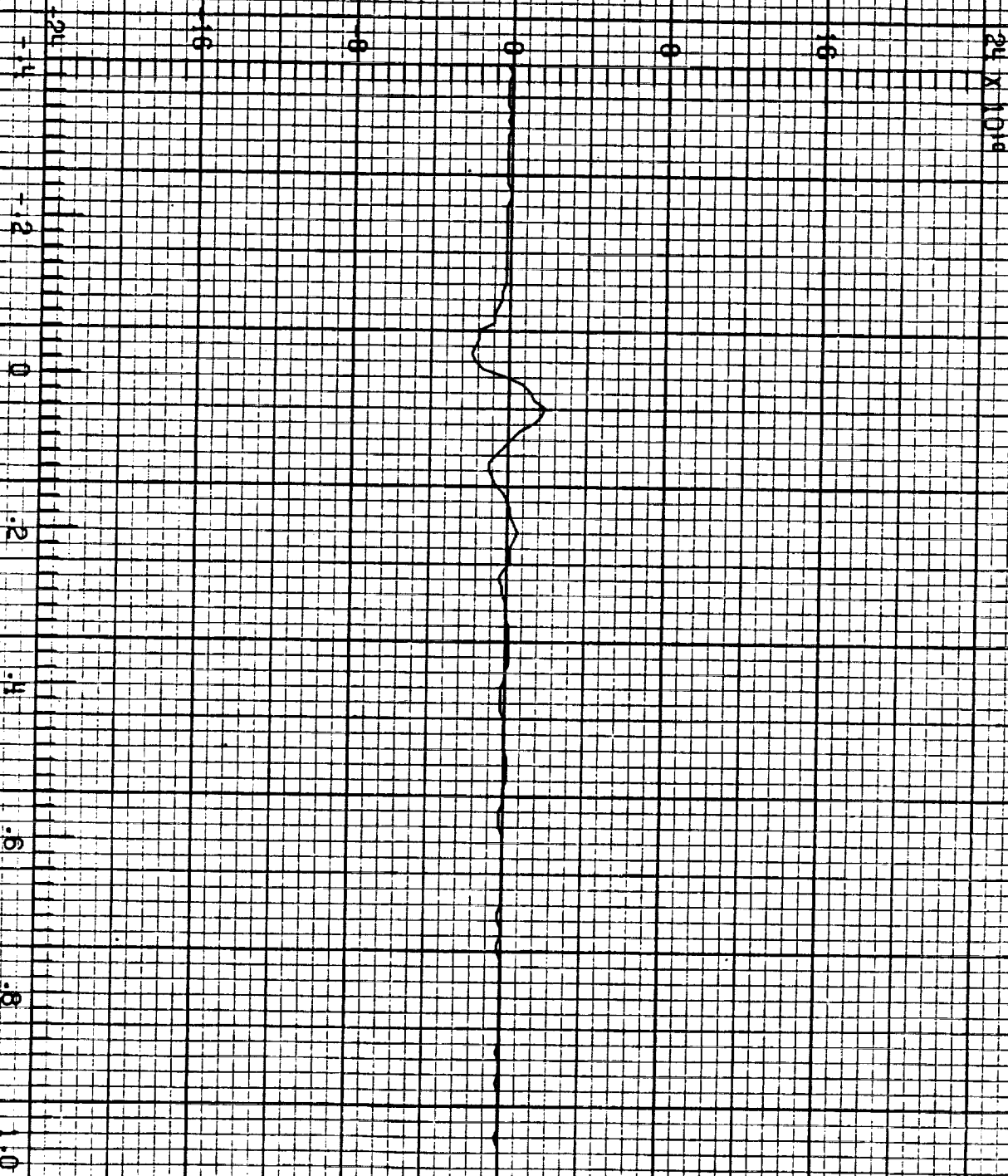
LEC 2 RUN NO. 1

5.001

\dot{I} A/s

19:38:06.0
CHANNEL NO. 2.2

MICROSECONDS



F-106 LIGHTNING/ 84-047

LEC 3 RUN NO. 1

6.001

\dot{D}_r A/m²

-15 -10 -5 0 5 10 15

-1

-2

0

.2

.4

.6

.8

1.0

MICROSECONDS

19:38:06.0
CHANNEL NO. 3.0

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

FCB RUN NO. 1

5.001

\dot{D}_{w1} A/m²

19:38:06.0
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-047

1 FC 4 RUN NO. 1

5.001

TP 100

V_w V

-30 -20 -10 0 10 20 30

-1.5

-1.4

-1.3

-1.2

-1.1

0

.1

.2

MICROSECONDS

19:38:06.0
CHANNEL NO. 4.0

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

FC 4 RUN NO. 1

6.001

TP 101

V_{fb} V

19:38:06.0
CHANNEL NO. 4.1

MICROSECONDS

F-106 LIGHTNING/ 84-047

LEC 1 RUN NO. 2

8.003

T_r A

10 x 10³

19:38:53.2
CHANNEL NO. 1.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

1 FC 1 RUN NO. 2

6.003

I_t A

19:38:53.2
CHANNEL NO. 1.2

MICROSECONDS



F-106 LIGHTNING/ 84-047

IFC 2 RUN NO. 2

6.003

D_1 A/m²

19:38:53.2
CHANNEL NO. 2.0

MICROSECONDS

-3
-4
-2
0
.2
.4
.6
.8
1.0

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 184-047

1 FC 2 RUN NO. 2



F-106 LIGHTNING/ 84-047

IFC 2 RUN NO. 2

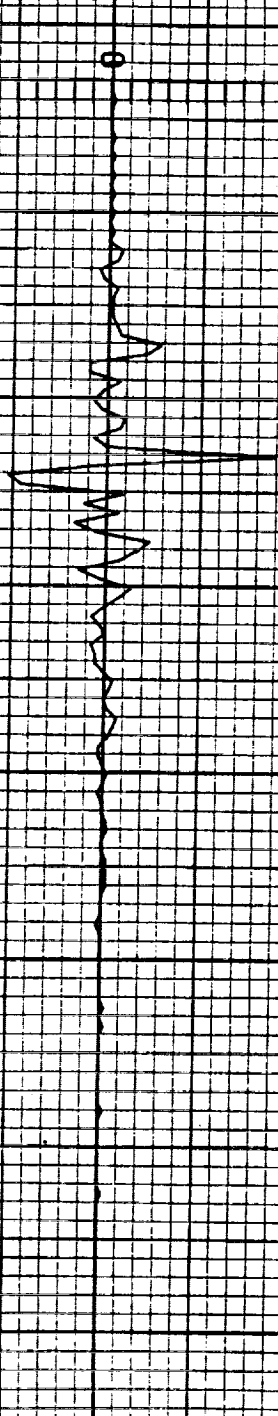
5.003

\dot{I} A/s

24×10^{14}

19:38:53.2
CHANNEL NO. 2.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

LEO 3 RUN NO. 2

5.003

\dot{D}_r A/m²

19:38:53.2
CHANNEL NO. 3.0

MICROSECONDS

F-106 LIGHTNING/ 64-047

LEC 3 RUN NO. 2

5.003

\bar{D}_w A/m²

19138153.2
CHANNEL NO. 3.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

1 EC 4 RUN NO. 2

6.003

TP 100

V_w V

19:38:53.2
CHANNEL NO. 4.0

MICROSECONDS

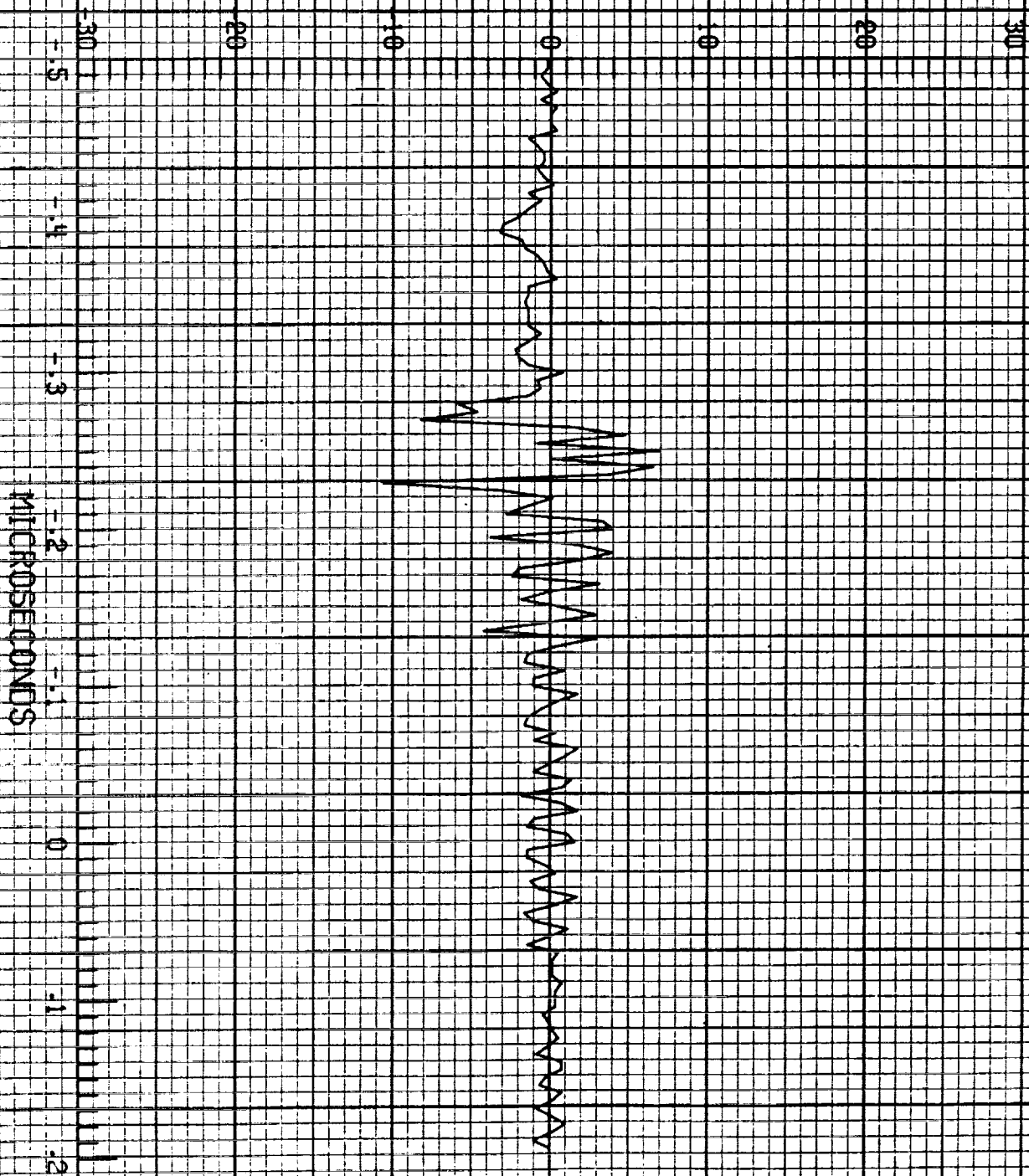
F-106 LIGHTNING/ 84-047

LEC 4 RUN NO. 2

S.003

TP 101

V 10 V



1130

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

LEC 1 RUN NO. 3

5.004

T_n A

19:50:05.3
CHANNEL NO. 1.1

MICROSECONDS

10 X 10³

1131

F-106 LIGHTNING/ 84-047

IFC1 RUN NO. 3

5.004

T₁ A

1.8

1.6

1.4

1.2

1.0

0.8

10 x 10³

0

.8

MICROSECONDS

1.6

2.4

3.2

4.0

4.8

19:50:05.5
CHANNEL NO. 1.2

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

LEO.2 RUN NO. 3

6.004

D_t A/m^2

19:50:05.5
CHANNEL NO. 2.0

MICROSECONDS

F-106 LIGHTNING/ 84-047

1 FC 2 RIN NO. 3

5.004

$\frac{E}{T/s}$

1800
1600
1400
1200
1000
800
600
400
200
0

-5

-14

-2

0

.2

.4

.6

.8

MICROSECONDS

119:50:05.3
CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

LEC 2 RUN NO. 3

5.004

I A/s

19:50:05.5
CHANNEL NO. 2.2

MICROSECONDS

24 x 10⁴

F=106 LIGHTNING/ 84-047

LEC 3 RUN NO. 3

5.004

D_r A/m²

19:50:05.3
CHANNEL NO. 3.0

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

LEC 3 RUN NO. 3

5.004

D_{wl} A/m^2

19:50:05.3
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-047

IFC4 RUN NO. 3

6.00H

TP 100

V₊

V

30 20 10 0 -10 -20 -30

19:50:05.5
CHANNEL NO. 4.0

MICROSECONDS

4 3 2 1 0 .1 .2

ORIGINAL PAGE IS
OF POOR QUALITY

-106 LIGHTNING/ 84-047

LEC 4 RUN NO. 3

6.004

V₁₀ V

12:50:05.5
CHANNEL NO. 4.1

MICROSECONDS

F-106 LIGHTNING/ 84-047

LEC1 RUN NO. 4

5.005

T_r A

10×10^3



20:12:36.1
CHANNEL NO. 1.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

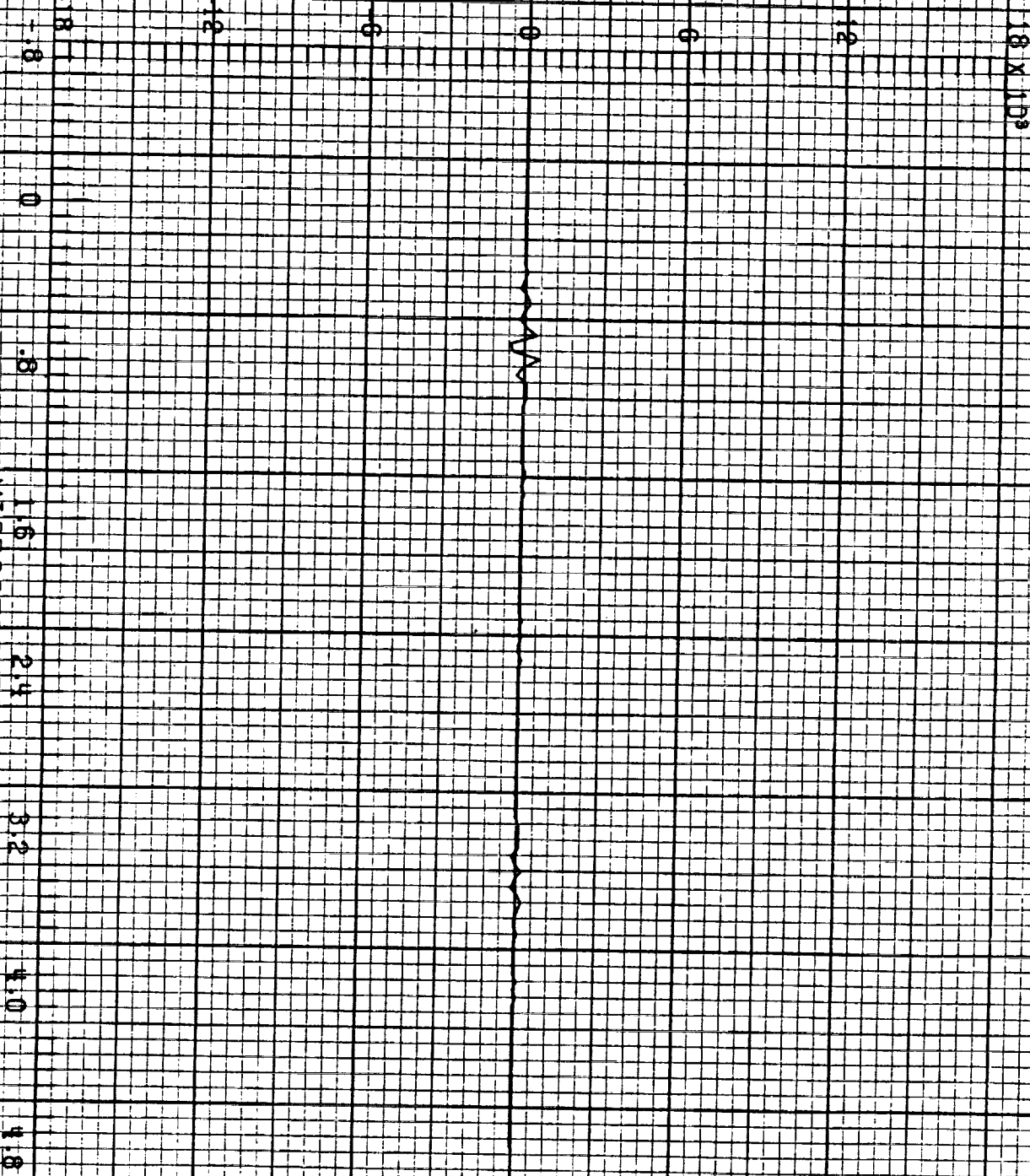
LEC 1 RUN NO. 4

6.005

I_c A

20:12:36.1
CHANNEL NO. 1.2

1.6
2.4
MICROSECONDS



F=106 LIGHTNING/ 84-047

LEC 2 RUN NO. 4

S.005

D_1 A/m²

20:12:36.1
CHANNEL NO. 2.0

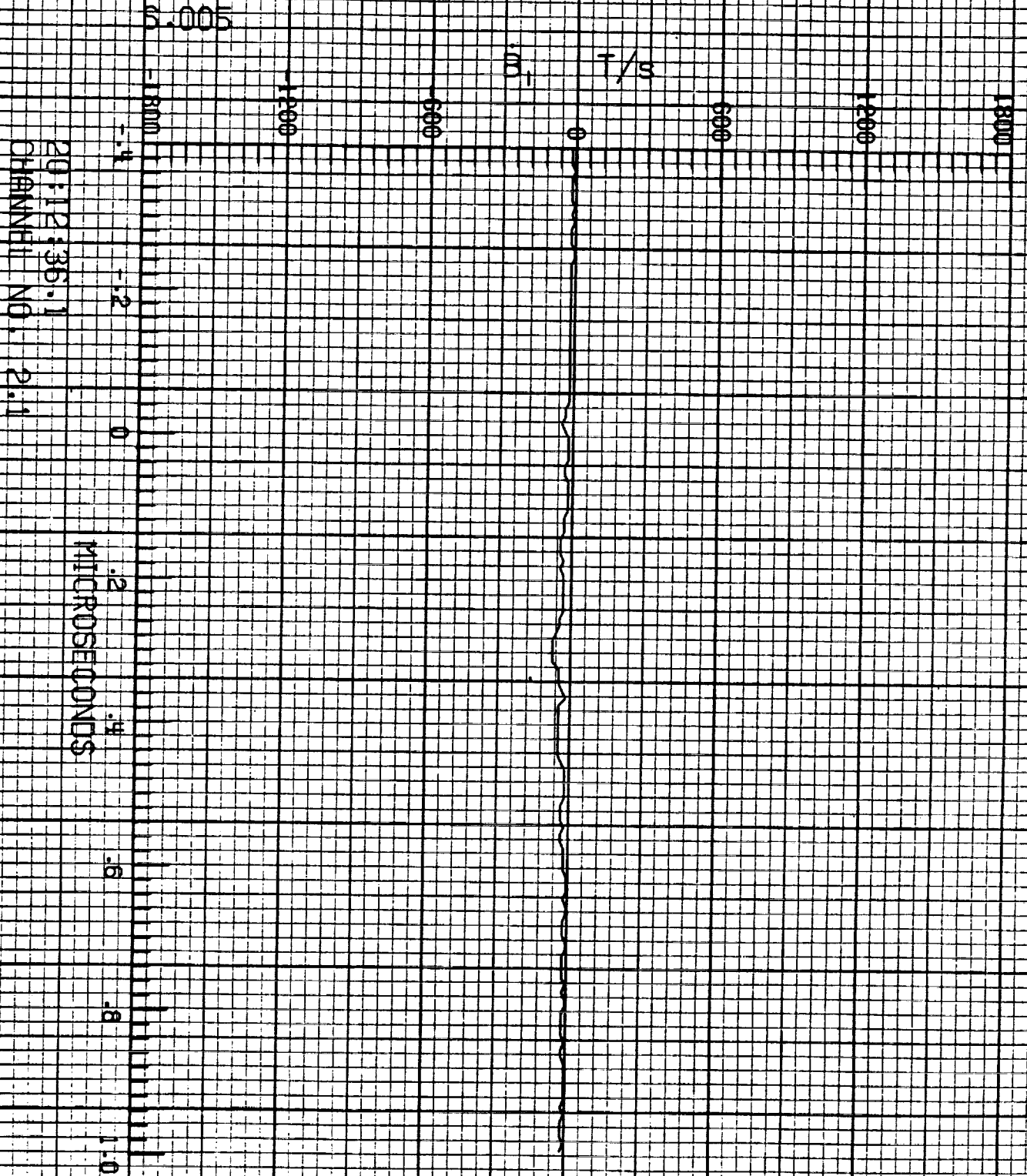
MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-105 LIGHTNING/ 84-047

LEC 2 RUN NO. 4



F-106 LIGHTNING/ 84-047

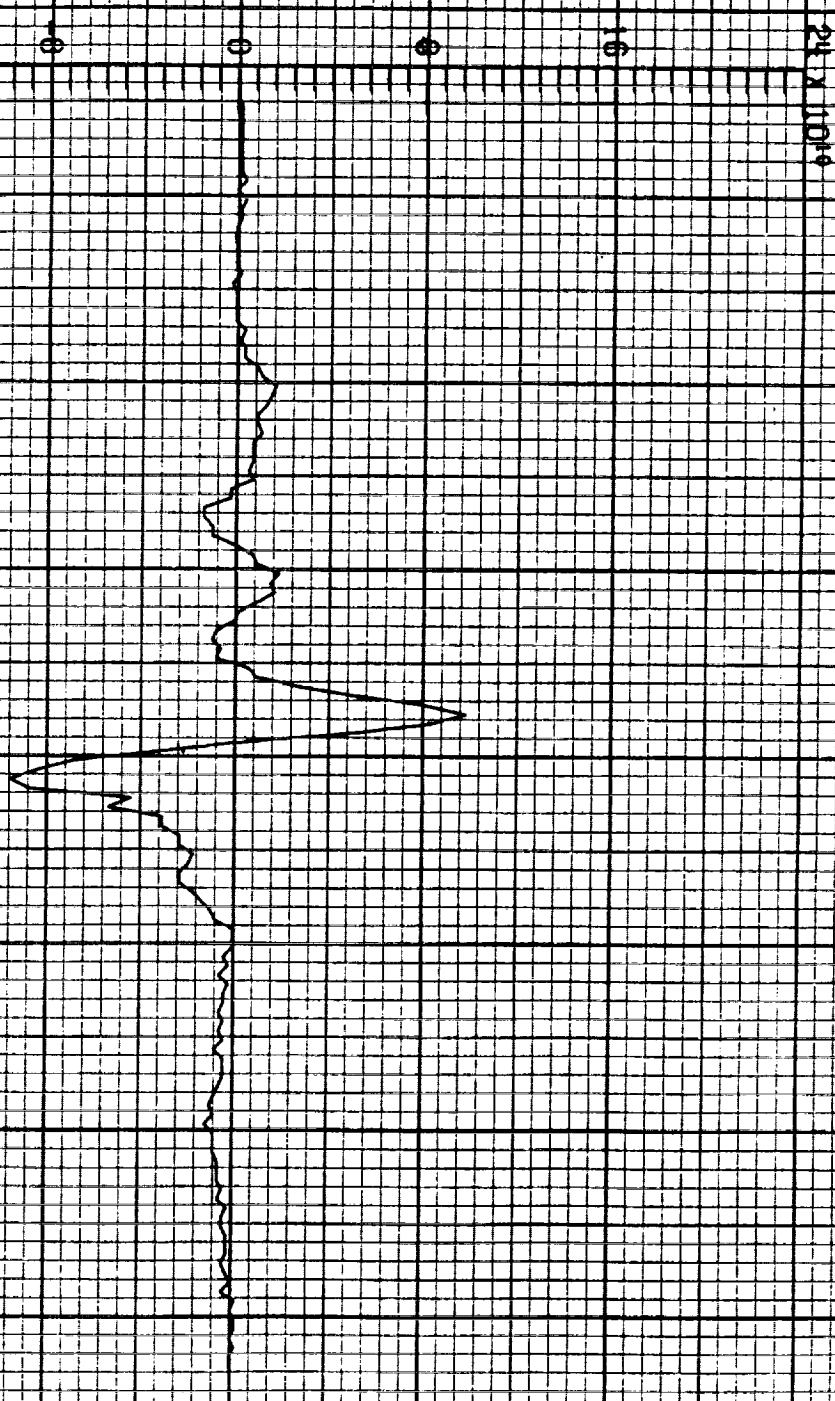
LEC2 RUN NO. 4

6.005

I A/s

20:12:36.1
CHANNEL NO. 2.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

IEC 3 RUN NO. 4

6.005

\dot{D}_r A/m²

20:12:36.1
CHANNEL NO. 3.0

MICROSECONDS

1145



F-106 LIGHTNING/ 84-047

LECS RUN NO. 4

6.0005

$$D_w \quad A/m^2$$

20:12:36.1
CHANNEL NO. 3.1

MICROSECONDS

11416

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-047

LEC 4 RUN NO. 4

3.005

TP 100

V₊

V

20:12:35.1
CHANNEL NO: 4.0

MICROSECONDS

F-105 LIGHTNING/ 84-047

LEC 4 RUN NO. 4

6.005

TP 101

V_{1b} V

20:12:36.1
CHANNEL NO. 4.1

MICROSECONDS

1148

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

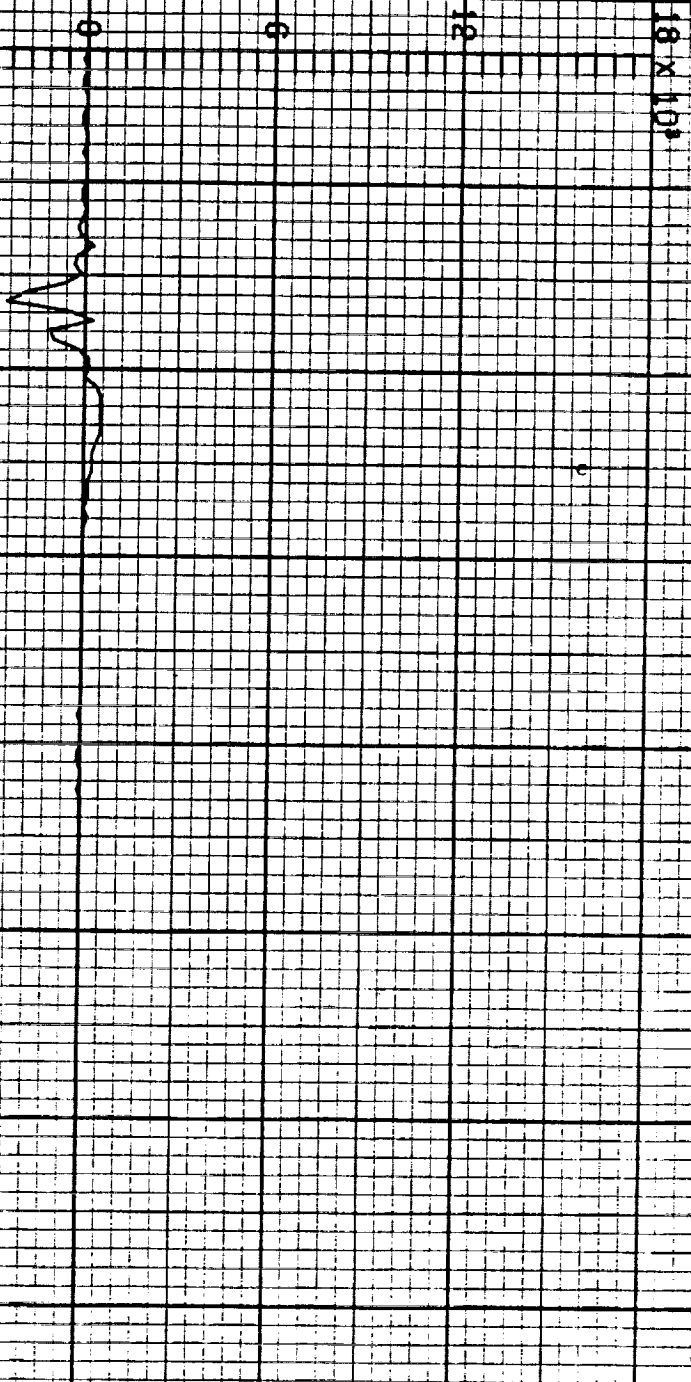
LEC 1 RUN NO. 1

5.002

I_n A

19:32:14.2
CHANNEL NO. 1.1

MICROSECONDS



F-106 LIGHTNING/ 84-048

LEC 1 RUN NO. 1

6.002

I_t A

18 16 14 12 10 8 6 4 2 0 -2 -4 -6 -8 -10 -12 -14 -16 -18

18 x 10³

0

.8

MICROSECONDS

1.6

2.4

3.2

4.0

4.8

19:32:14.2
CHANNEL NO. 1.2

ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-048

IFC 2 RUN NO. 1

8.002

D_t A/m²

19:32:14.2
CHANNEL NO. 2.0

MICROSECONDS

F-106 LIGHTNING/ 84-048

LEC2 RUN NO. 1

6.002

$\frac{dV}{dt}$

1800 1600 1400 1200 1000 800 600 400 200 0

-.4

-.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

19:32:14.2
CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

EC-2 RUN NO. 1

5.002

I A/s

19:32:14.2
CHANNEL NO. 2.2

MICROSECONDS

24 x 10¹⁰

F-106 LIGHTNING/ 84-048

LEC3 RUN NO. 1

6.002

\dot{D}_w A/m²

19:32:14.2
CHANNEL NO. 3.1

MICROSECONDS

-1.8
-1.6
-1.4
-1.2
-1.0
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1.0

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

LEC 4 RUN NO. 1

5.002

TP 100

V_w V

19:32:14.2
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-048

LEC 4 RUN NO. 1

3.002

TP 101

V 10 V

19:32:14.2
CHANNEL NO. 4.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-048

LEC 4 RUN NO. 1

3.002

TP123 A

19:32:14.2
CHANNEL NO. 4.2

MICROSECONDS

F-106 LIGHTNING/184-048

LEC1 RUN NO. 2

6.003

I_n A

18 x 10³

19:36:51.2
CHANNEL NO. 1.1

MICROSECONDS

0

.8

1.6

2.4

3.2

4.0

4.8

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

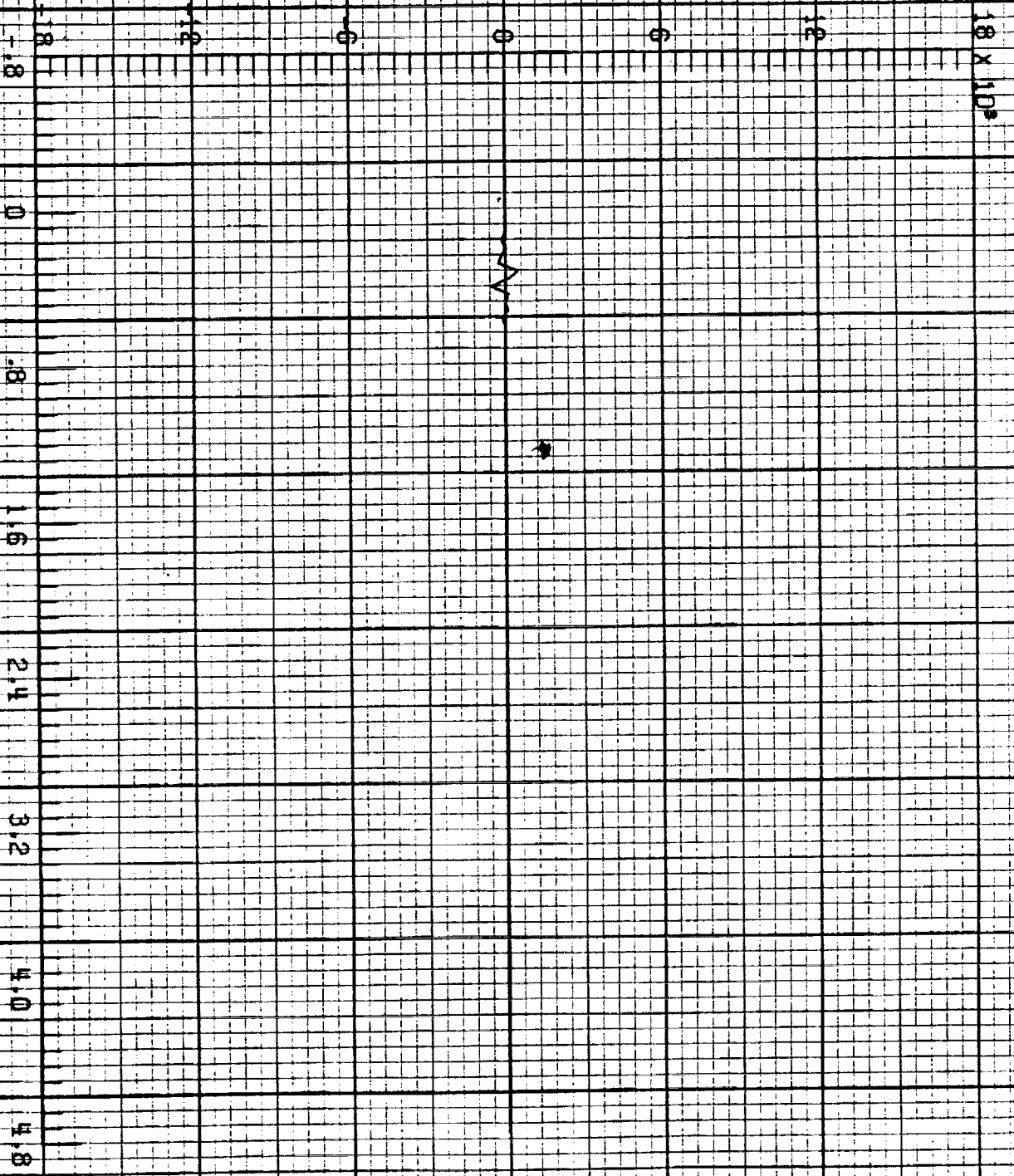
LEC 1 RUN NO. 2

6.008

I₁ A

19:36:51.2
CHANNEL NO. 1.2

MICROSECONDS



F-106 LIGHTNING/ 84-048

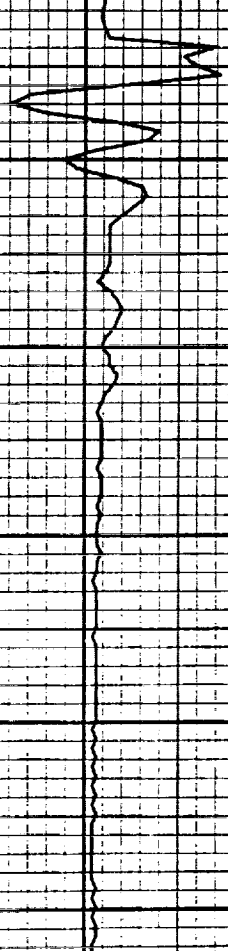
1 EC2 RUN NO. 2

6.003

\hat{D}_1 A/m²

19:36:51.2
CHANNEL NO. 2.0

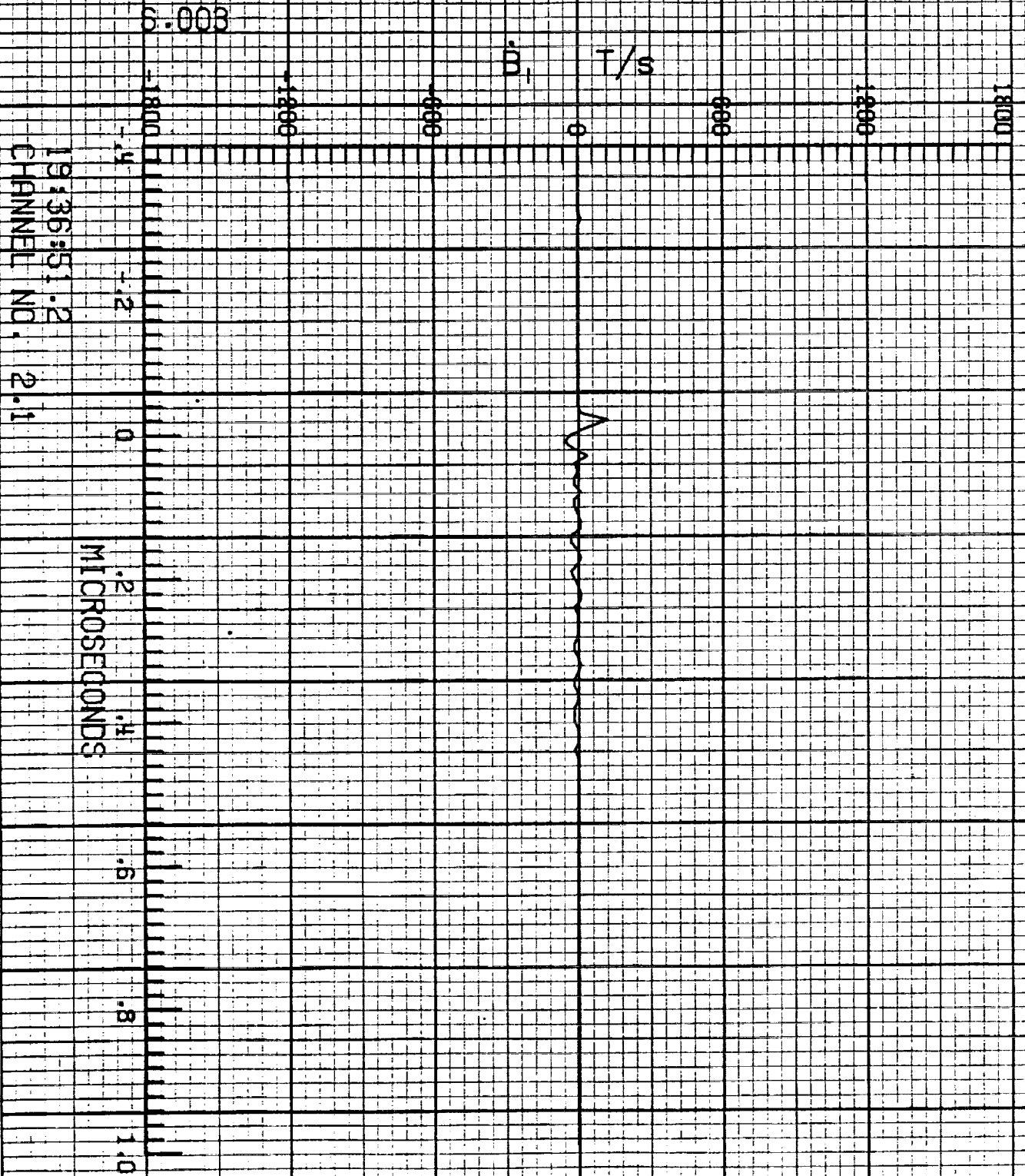
MICROSECONDS



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OF POOR QUALITY

F-106 LIGHTNING/ 64-048

LEC 2 RUN NO. 2



F-106 LIGHTNING/ 84-048

1 EC2 RUN NO. 2

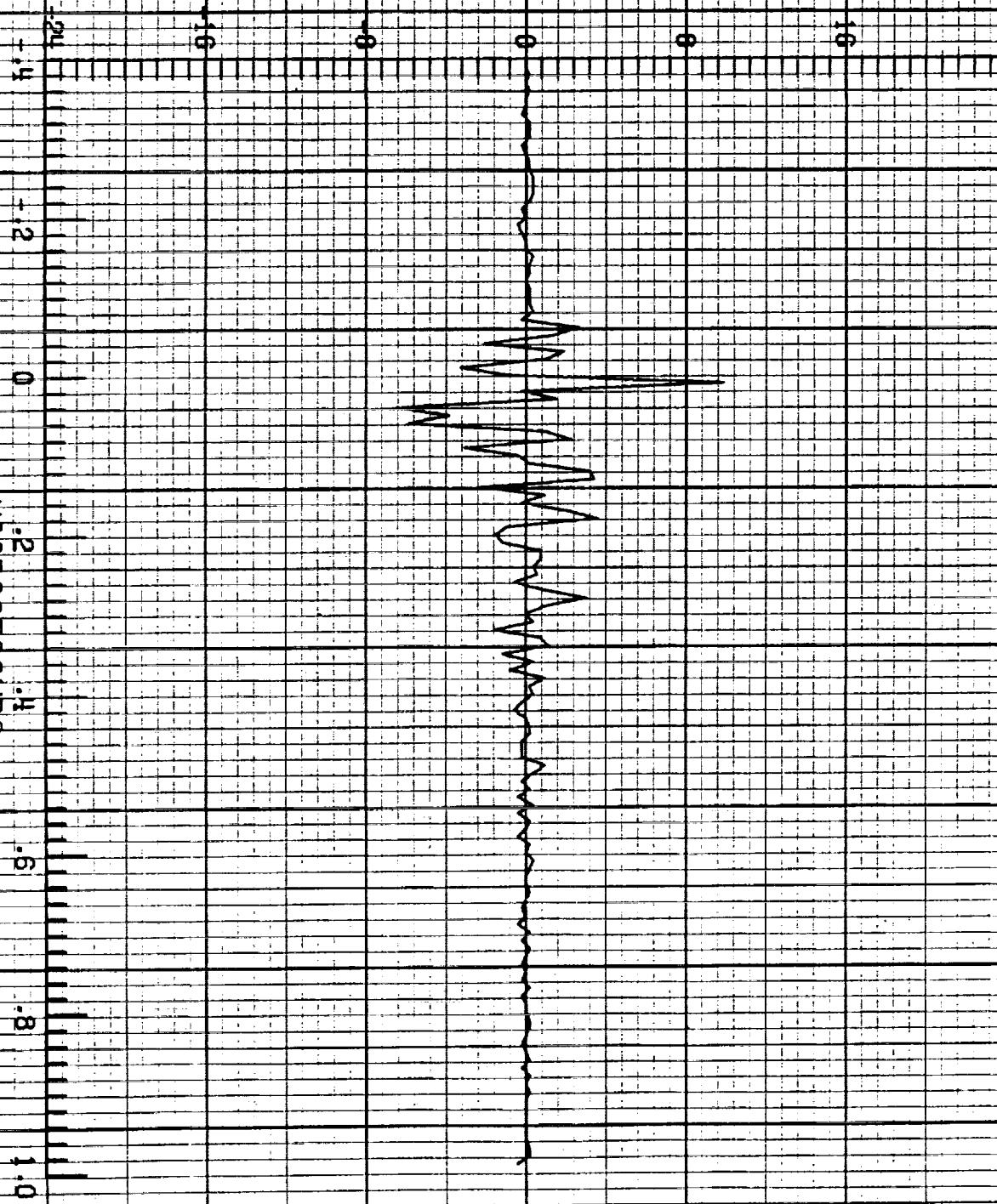
3.003

\dot{I} A/s

24×10^{14}

19:35:51.2
CHANNEL NO. 2.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

LEC 3 RUN NO. 2

5.003

D_w A/m^2

19:36:51.2
CHANNEL NO. 3.1

MICROSECONDS

1163

F-106 LIGHTNING/ 84-048

LEC 4 RUN NO. 2

5.003

TP 100

V₊ V

19:36:51.2
CHANNEL NO. 4.0

MICROSECONDS

F-105 LIGHTNING/ 84-048

LEC4 RUN NO. 2

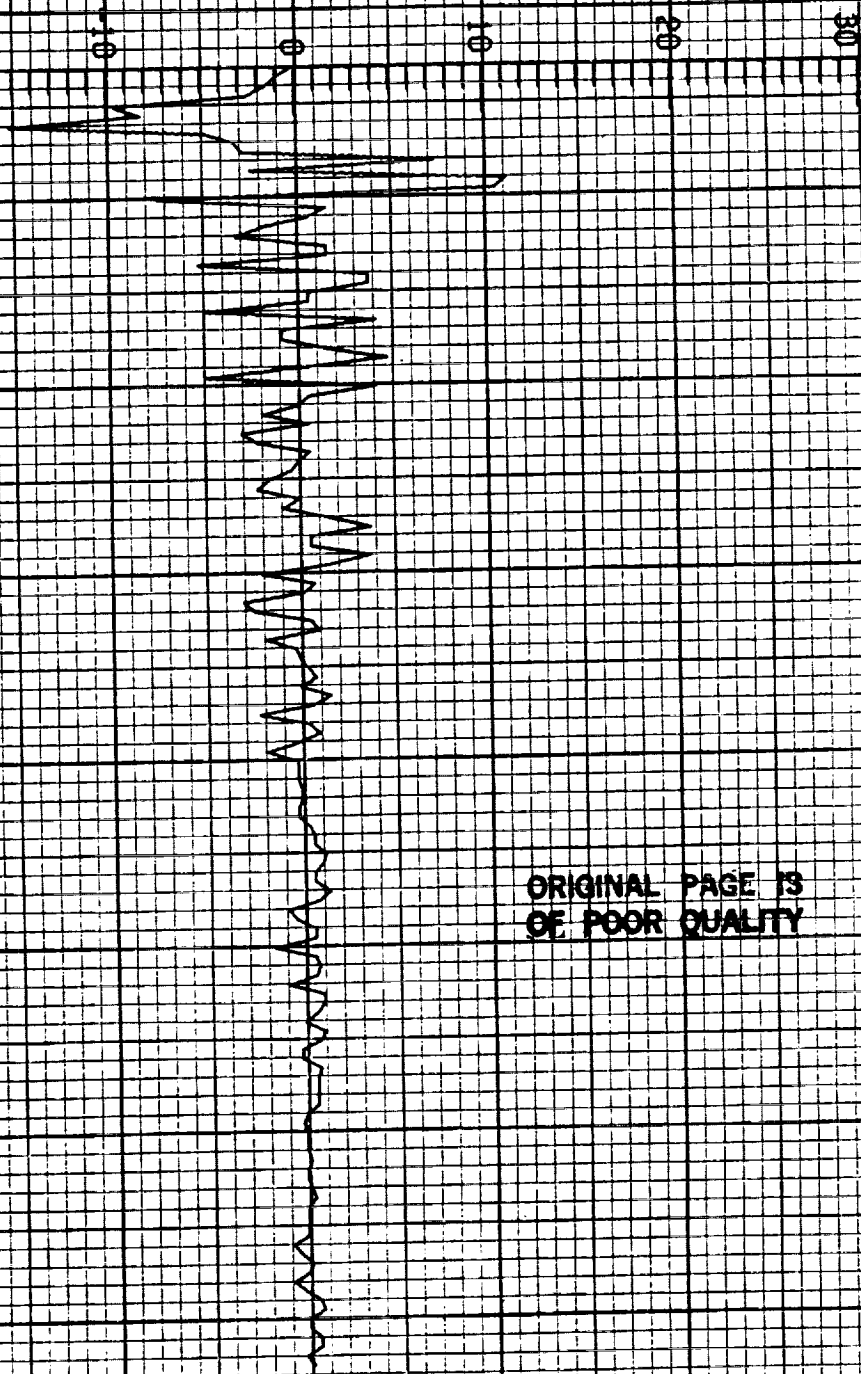
TP 101

3.003

V_{fb} V

19:36:51.2
CHANNEL NO. 4.1

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

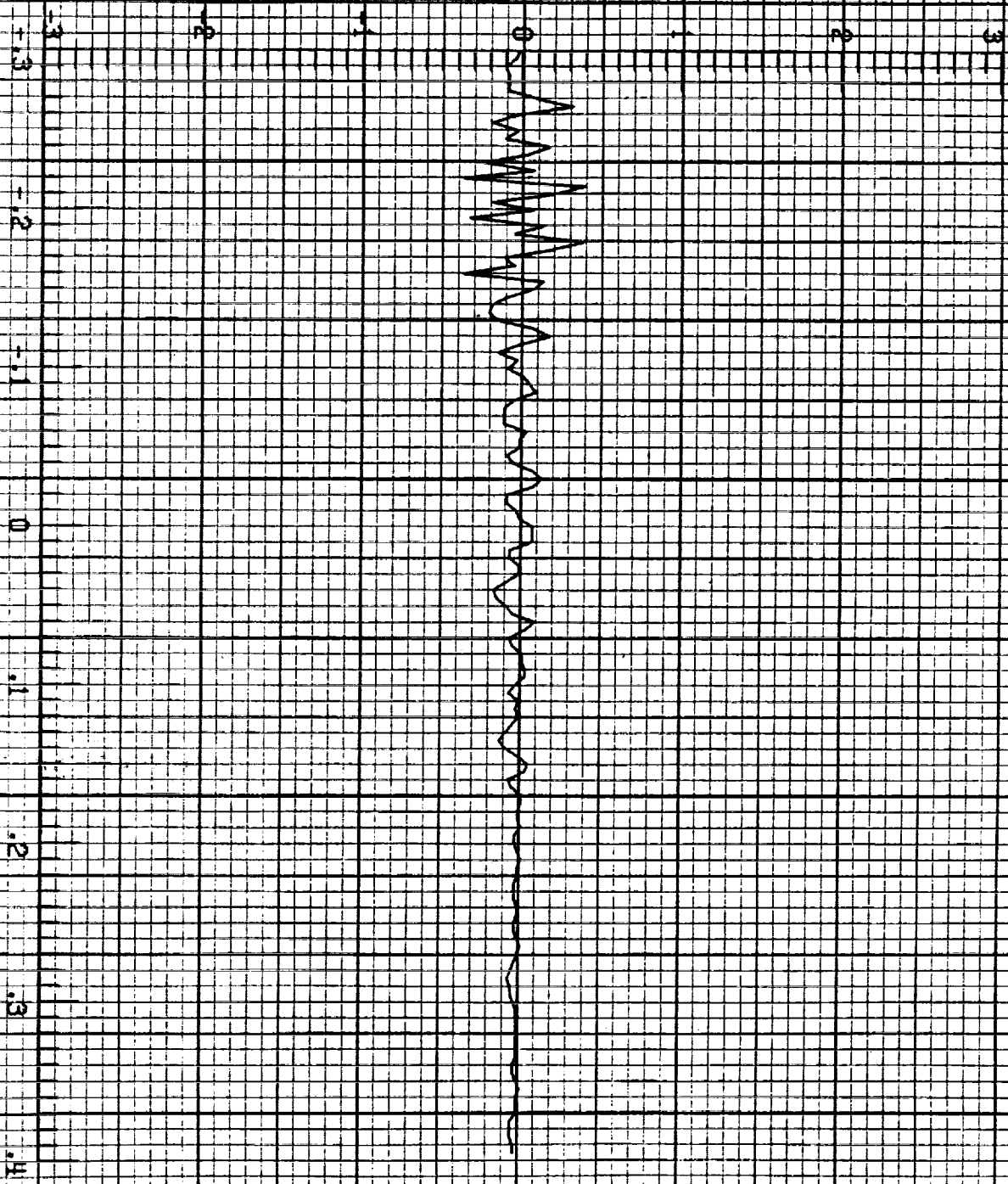
FC 4 RUN NO. 2

8.008

TP123 A

19:36:51.2
CHANNEL NO. 4.2

MICROSECONDS



F-106 LIGHTNING/ 84-048

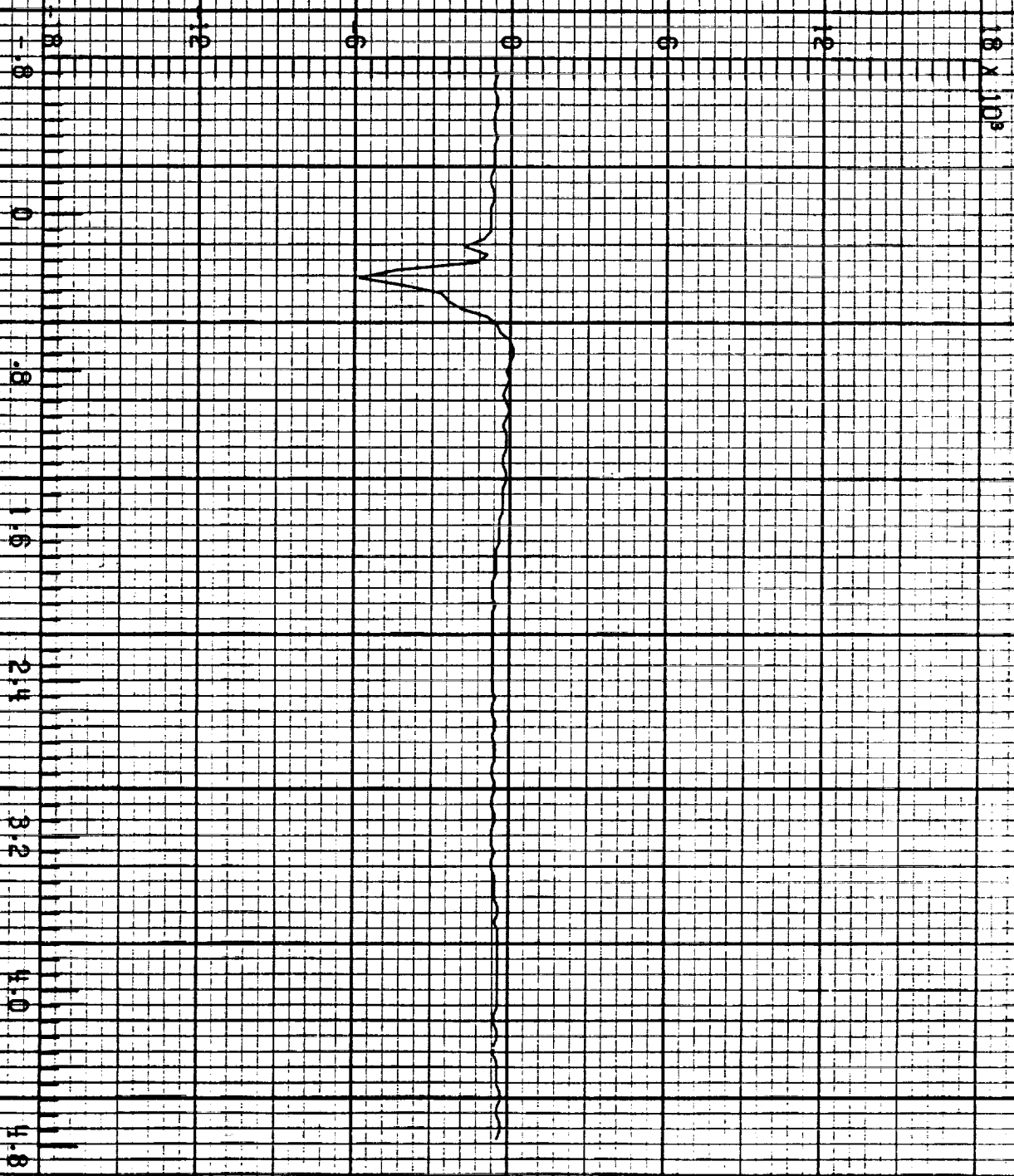
IFC 1 RUN NO. 3

6.004

I_n A

19:48:39.1
CHANNEL NO. 1.1

MICROSECONDS



LEC 1 RUN NO. 3

I, A

 18×10^8

19:48:35.1
CHANNEL NO.: 1.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

LEC 2 RUN NO. 3

5.00#

D_1 A/m^2

19:48:35.1
CHANNEL NO. 2.0

MICROSECONDS

E-106 LIGHTNING/ 84-048

1 FC 2 RUN NO. 3

6.004

\hat{B}_1 T/s

-1800

-1600

-1400

0

1400

1600

1800

-.4

-.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

19:48:35.1
CHANNEL NO. 2:1

ORIGINAL PAGE 13
OF POOR QUALITY

F-106 LIGHTNING/ 184-048

LEC 2 RUN NO. 3

6.004

i A/s

19:48:35.1
CHANNEL NO. 2.2

MICROSECONDS

24 x 10¹⁰

1171

F-106 LIGHTNING/ 84-048

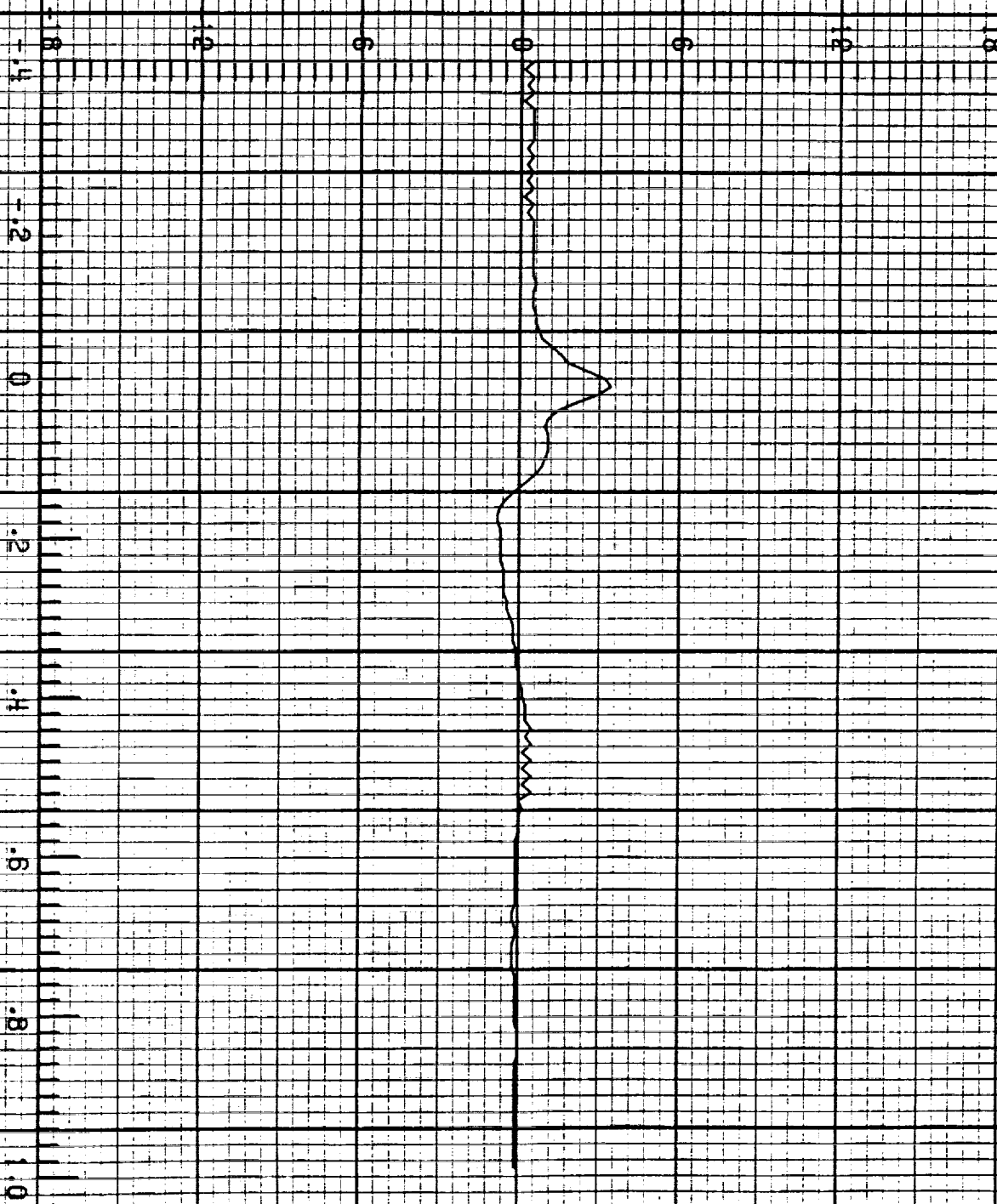
LEC 3 RUN NO. 3

5.004

\bar{D}_{w1} A/m²

19:48:35.1
CHANNEL NO. 3.1

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

LEC 4 RUN NO. 3

6.004

TP 100

V

V

19:48:35.1
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-048

LECH RUN NO. 3

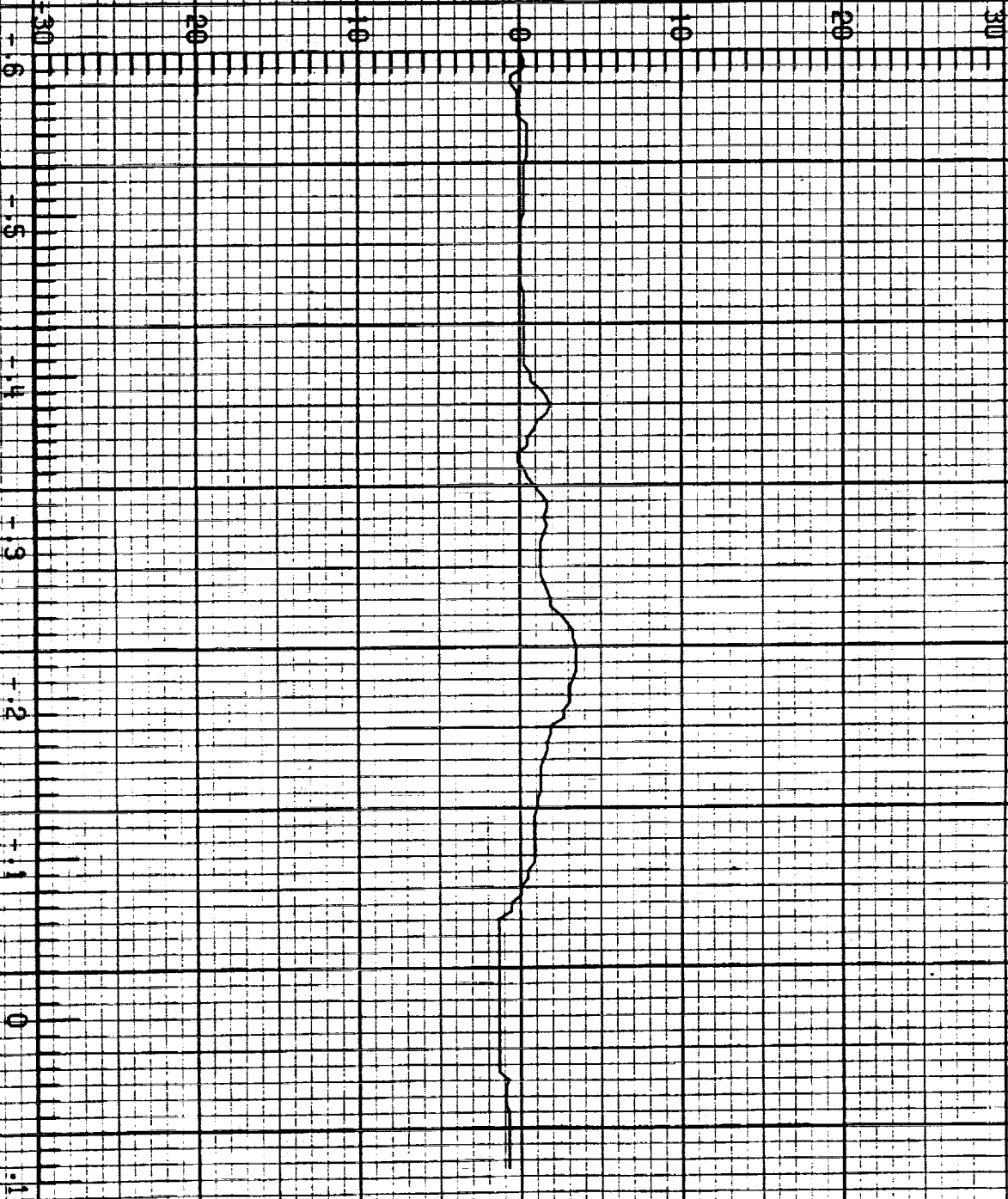
6.004

TP 101

V_{to} V

19:48:35.1
CHANNEL NO. 4:1

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

LEC 4 RUN NO. 3

6.004

TP123 A

19:48:35.1
CHANNEL NO. 4.2

MICROSECONDS

F-106 LIGHTNING/ 84-048

LFC 1 RUN NO. 4

N.001

T_n A

10 x 10³

20:03:46.2
CHANNEL NO. 1.1

MICROSECONDS

E-106 LIGHTNING/ 84-048

LEC1 RUN NO. 4

N.001

I₁ A

20:03:46.2
CHANNEL NO. 1.2

MICROSECONDS

18 x 10³

F-106 LIGHTNING/ 84-048

1 FC 2 RUN NO. 4

N.001

100

τ/s

-1800

-1200

-600

0

600

1200

1800

-.4

-.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

20:03:46.2
CHANNEL NO. 2.1

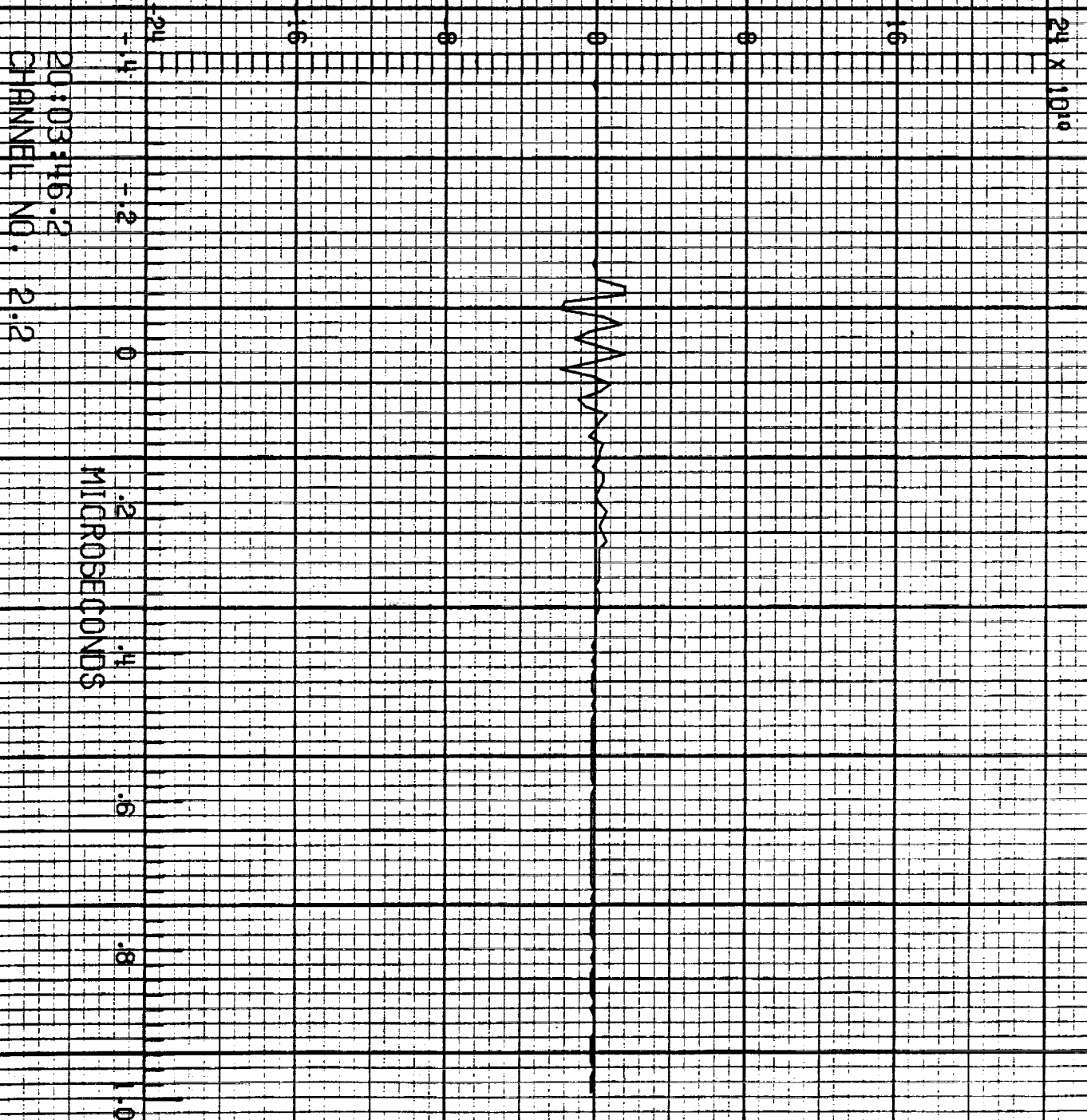
ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-048

LEC 2 RUN NO. 4

N.001

\dot{I} A/s



F=106 LIGHTNING/ 84-048

LEC 3 RUN NO. 4

N.001

\bar{D}_w A/m²

1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0

0.4 0.2 0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8

0.2

0

MICROSECONDS

0.2

0.4

0.6

0.8

1.0

1180

C-3

20:03:46.2
CHANNEL NO. 3.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

LEC# RUN NO. 4

N.001

TP 101

V_{to} V

20:03:46.2
CHANNEL NO. 4.1

MICROSECONDS

F-106 LIGHTNING/ 84-048

LEC 4 RUN NO. 4

N.001

TP123 A

20:03:46.2
CHANNEL NO. 4.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

IFC 1 RUN NO. 5

6.005

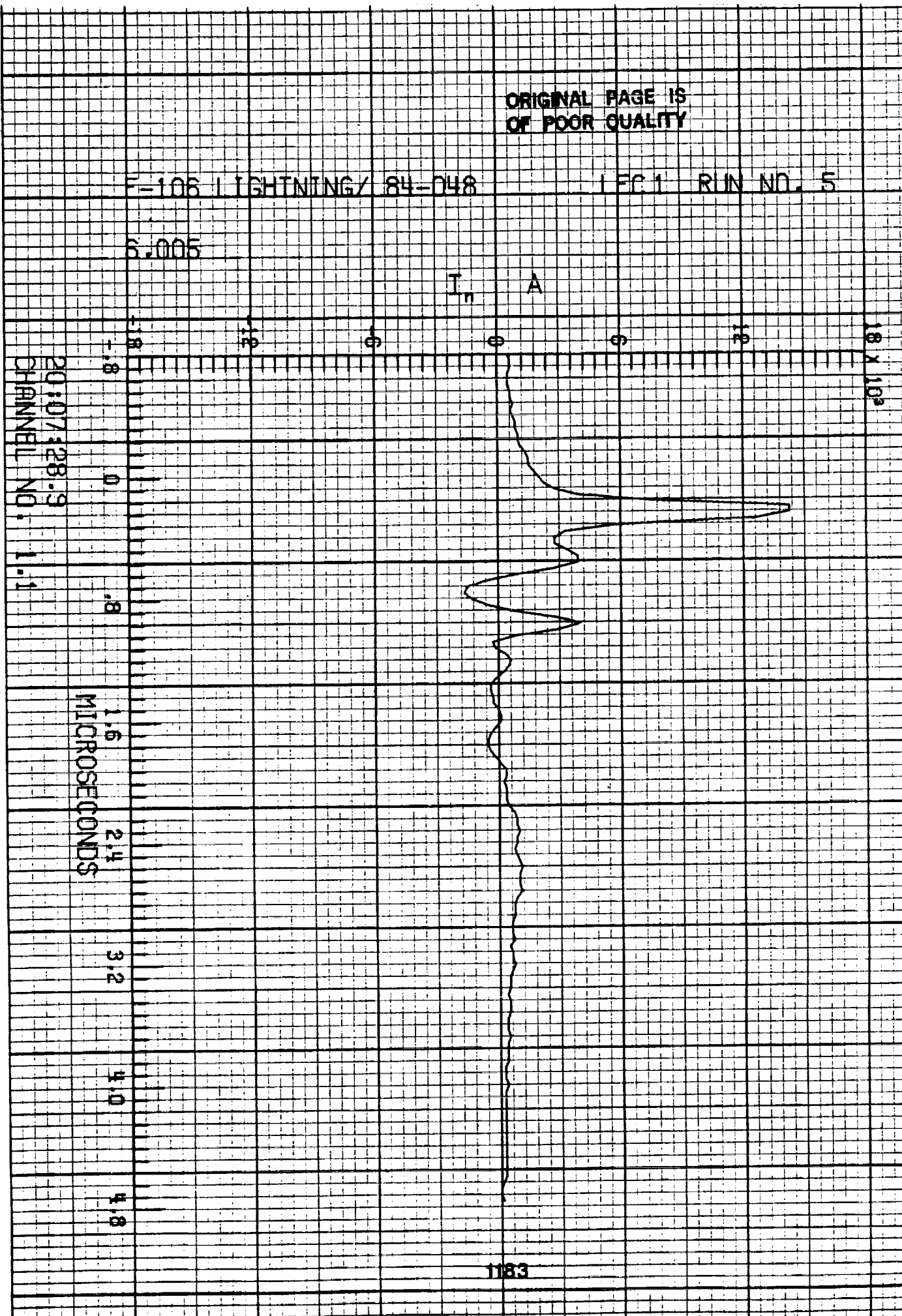
I_n A

20:07:28.9
CHANNEL NO. 1.1

MICROSECONDS

10×10^3

1183



F-106 LIGHTNING/ 84-048

LEC 1 RUN NO. 5

5.005

I, A

20:07:28.9
CHANNEL NO. 1.2

MICROSECONDS

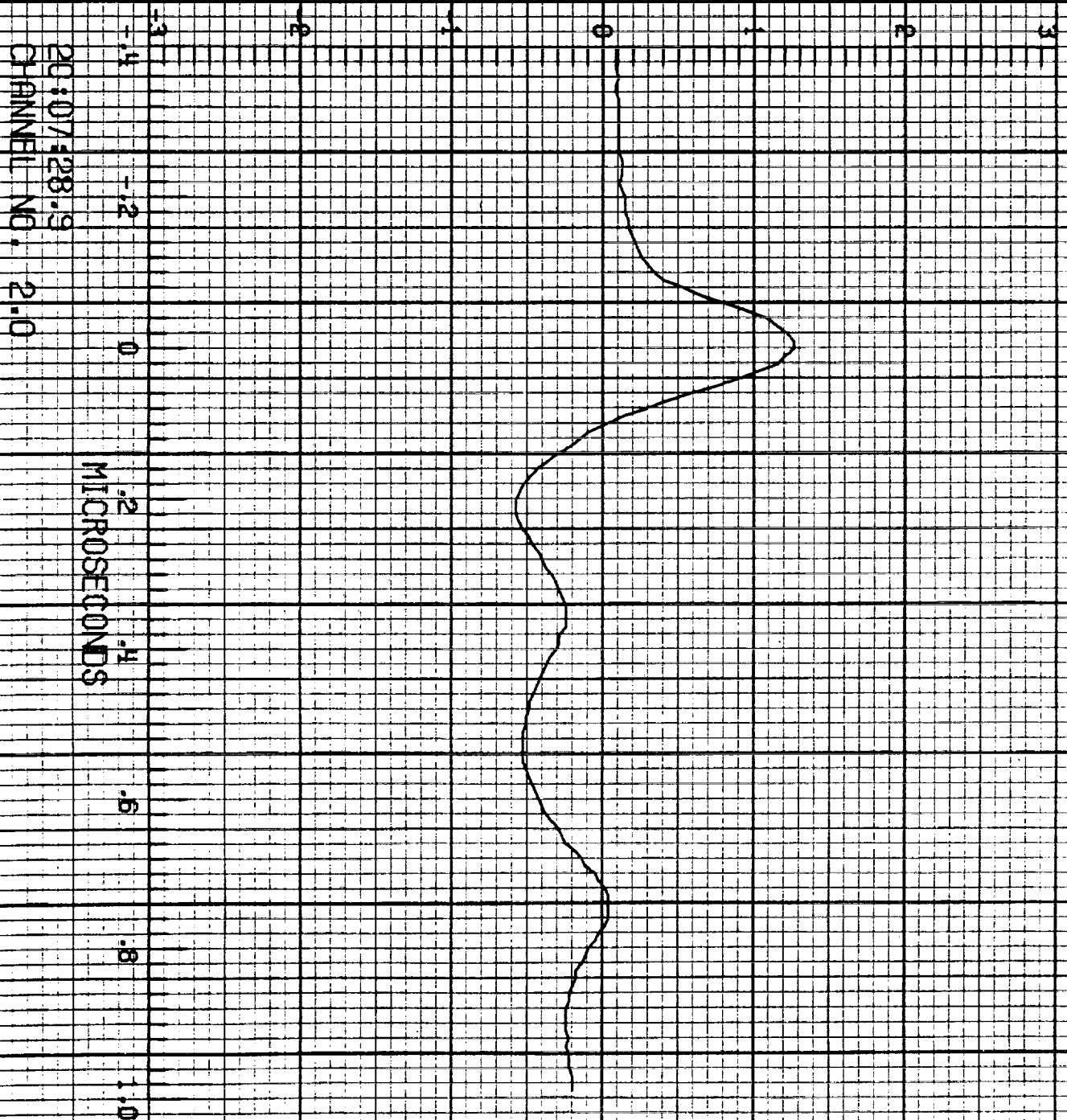
ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

IFC2 RUN NO. 5

5.005

\bar{D}_t A/m²



F-106 LIGHTNING/ 84-048

LEC2 RUN NO. 5

5.005

100

1/s

1800

1200

600

0

600

1200

1800

-.4

-.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

20:07:28.3

CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

LEC 2 RUN NO. 5

6.005

I A/s

20:07:28.9
CHANNEL NO. 2.2

24×10^{10}

MICROSECONDS

-106 LIGHTNING/ 84-048

LEC3 RUN NO. 5

6.005

\dot{D}_{wt} A/m^2

18 18 6 0 6 18 18

0.2

0

0.2

0.4

0.6

0.8

1.0

MICROSECONDS

20:07:28.9
CHANNEL NO. 3.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

1 EC4 RUN NO. 5

TP 100

5.005

V₊ V

20:07:28.9
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-048

LEC 4 RIN NO. 5

5.005

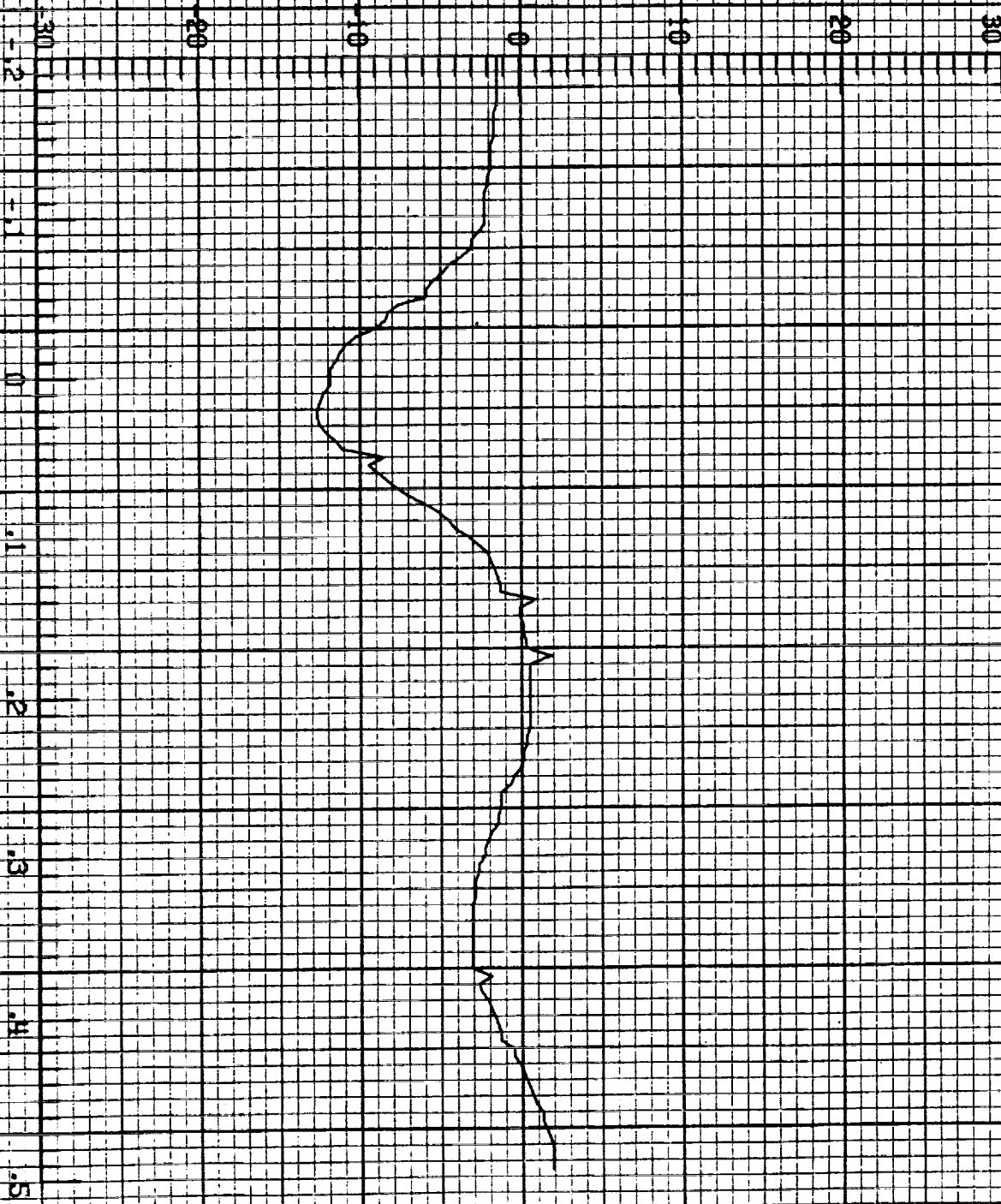
TP 101

V_{1b} V

20:07:28.9
CHANNEL NO. 4.1

MICROSECONDS

1190



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-048

LFC 4 RUN NO. 5

5.005

TP123 A

20:07:28.8
CHANNEL NO. 4.2

MICROSECONDS

F-106 LIGHTNING/ 84-049

1 FC1 RUN NO. 1

5.001

I_n A

18 x 10³

19:30:03.5
CHANNEL NO. 1.1

MICROSECONDS

0.8 1.6 2.4 3.2 4.0 4.8

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-049

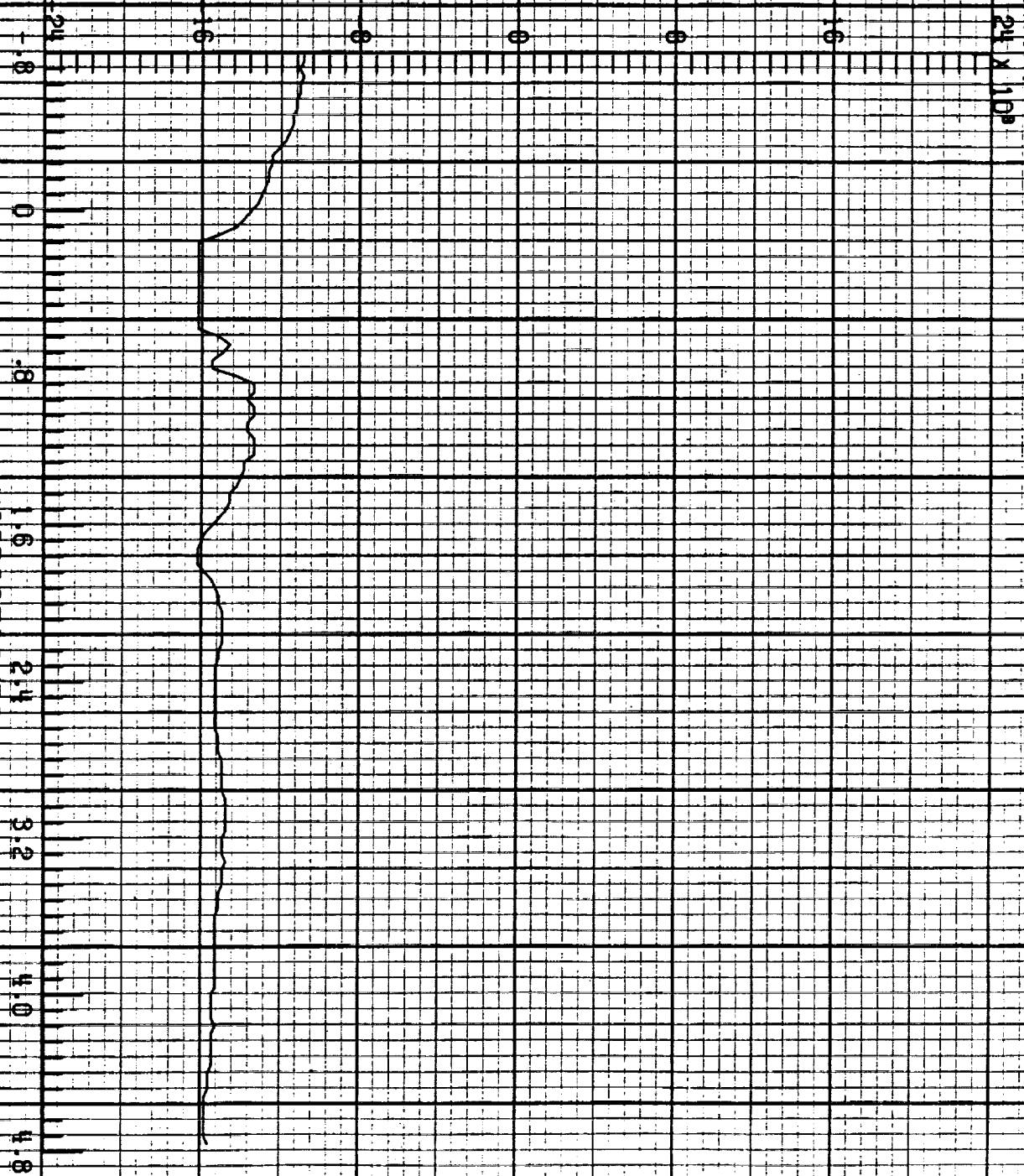
FC 1 RUN NO. 1

6.001

T_t A

19:30:03.3
CHANNEL NO. 1.2

MICROSECONDS



F-106 LIGHTNING/ 84-049

1 FC2 RUN NO. 1

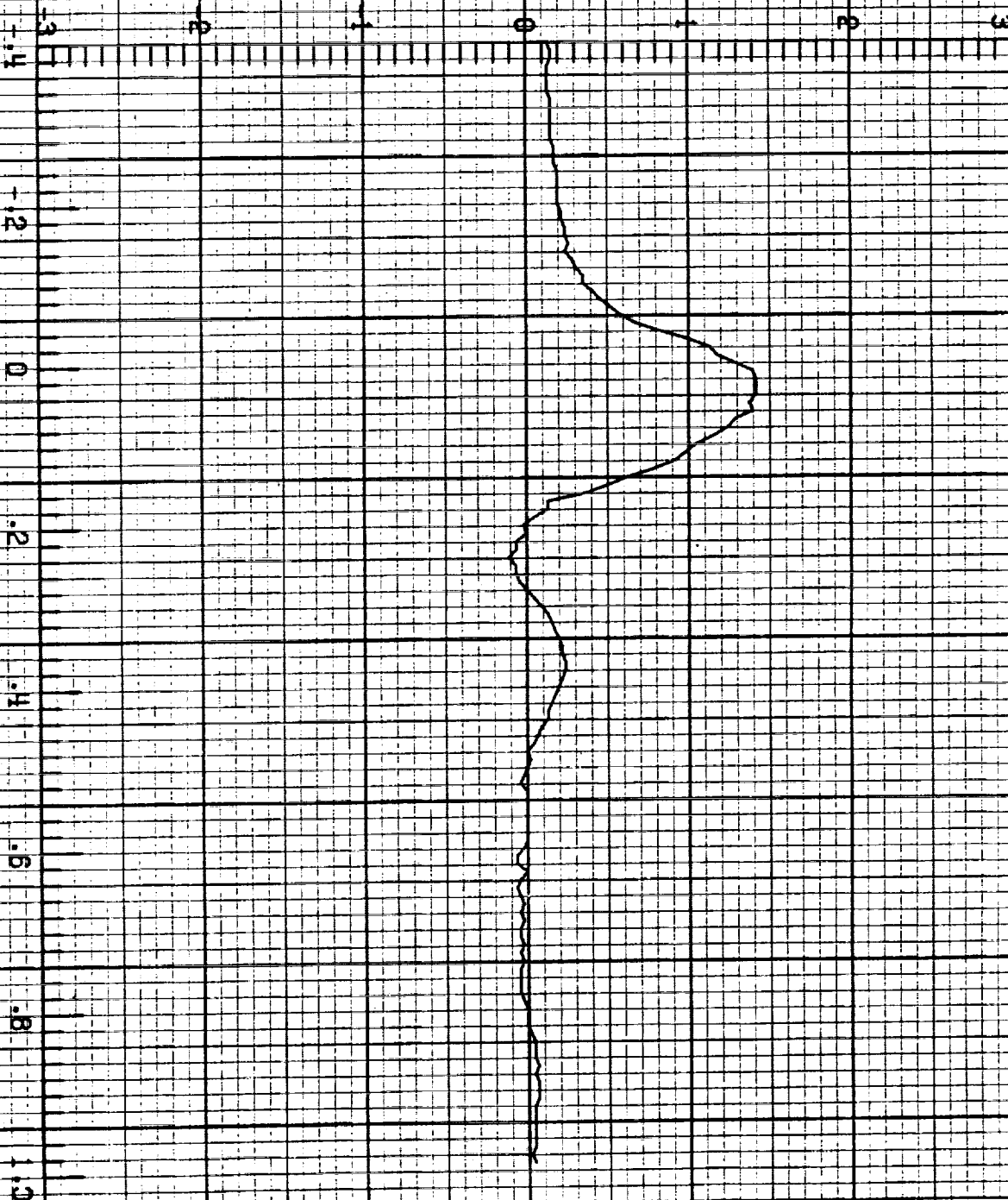
5.001

D_t A/m^2

19:30:03.5
CHANNEL NO. 2.0

MICROSECONDS

1194



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-049

IFC2 RUN NO. 1

5.001

\dot{I} A/s

19:30:03.5
CHANNEL NO. 2.1

MICROSECONDS

24 x 10¹⁰

F-106 LIGHTNING/ 84-049

LEC2 RUN NO. 1

5.001

\dot{B}_1 T/s

-1800 -1200 -600 0 600 1200 1800

1.5

1.2

0

.2

.4

.6

.8

1.0

MICROSECONDS

19:30:03.5
CHANNEL NO. 2.2

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-049

IFC3 RUN NO. 1

5.001

\hat{D}_{wr} A/m^2

19:30:03.5
CHANNEL NO. 3.0

MICROSECONDS

F-106 LIGHTNING/ 84-049

1 EC 3 RUN NO. 1

S.001

\dot{D}_{wl} A/m²

19:30:03.5
CHANNEL NO. 3.1

18
16
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
MICROSECONDS
.2
.4
.6
.8
1.0

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-049

LECS RUN NO. 1

3.001

\bar{D}_r A/m²

19:30:03.5
CHANNEL NO. 3.2

MICROSECONDS

F-106 LIGHTNING/ 84-049

LEC 4 RUN NO. 1

5.001

TP 100

V₊ V

-30 -20 -10 0 10 20 30

-.2

-.1

0

.1

.2

.3

.4

.5

MICROSECONDS

19:30:03.5
CHANNEL NO. 4.0

1200

ORIGINAL PAGE IS
OF POOR QUALITY

E=106 LIGHTNING/ 84-049

LECH RUN NO. 1

5.001

TP 101

V₁₀ V

19:30:08.8
CHANNEL NO. 4.1

MICROSECONDS

1201

F-106 LIGHTNING/ 84-049

IFC 4 RUN NO. 1

6.001

TP123 A

19:30:03.5
CHANNEL NO. 4.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 1 RUN NO. 1

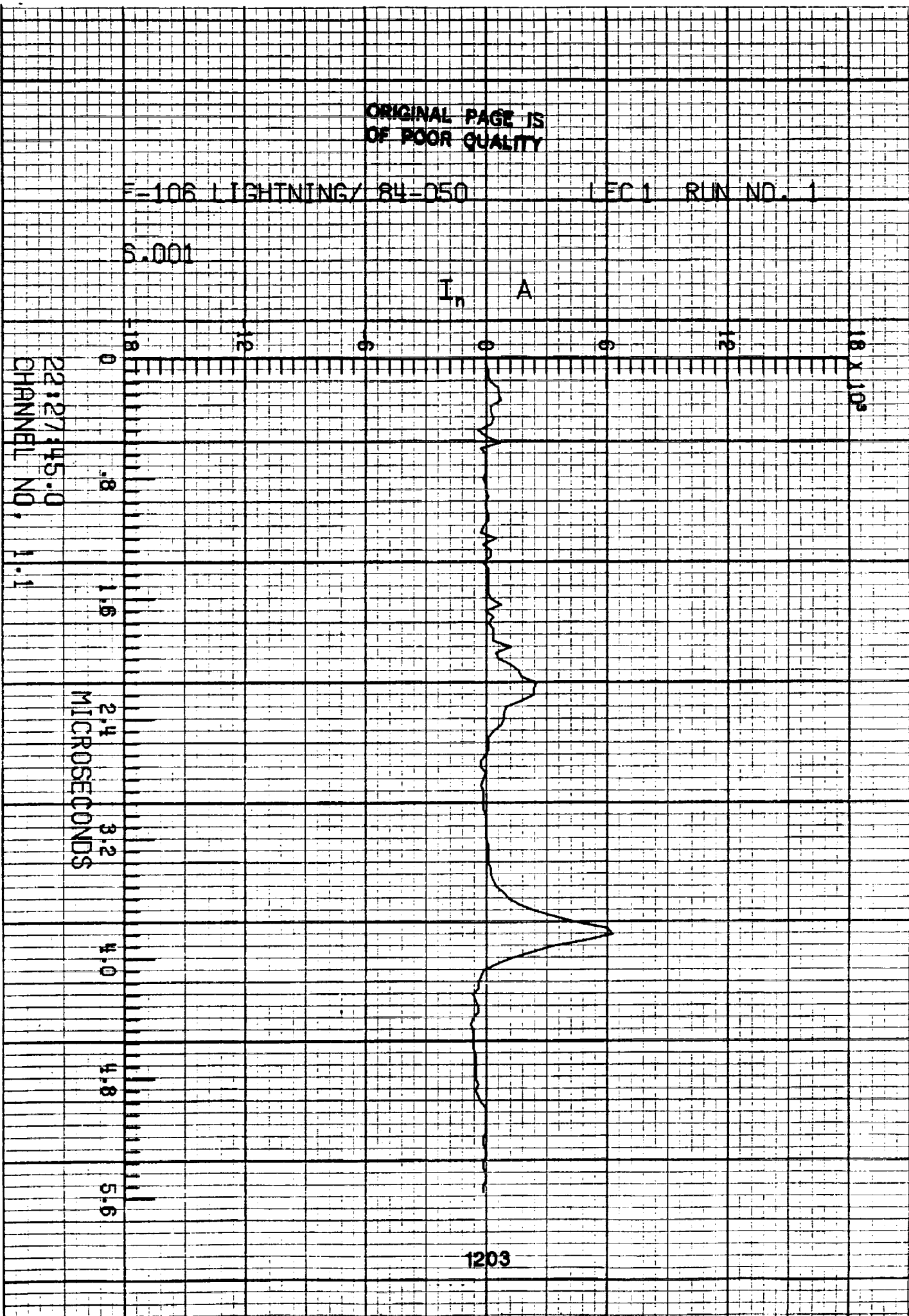
5.001

I_n A

22:27:45.0
CHANNEL NO. 1.1

MICROSECONDS

1203

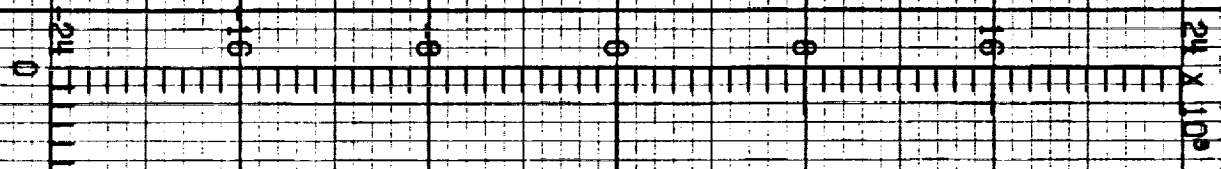


F-106 LIGHTNING/ 84-050

LEC 1 RUN NO. 1

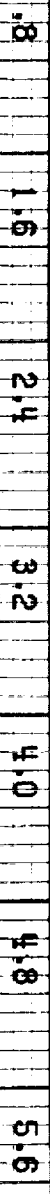
5.001

I_t A



22:27:45.0
CHANNEL NO. 1.2

MICROSECONDS



F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 1

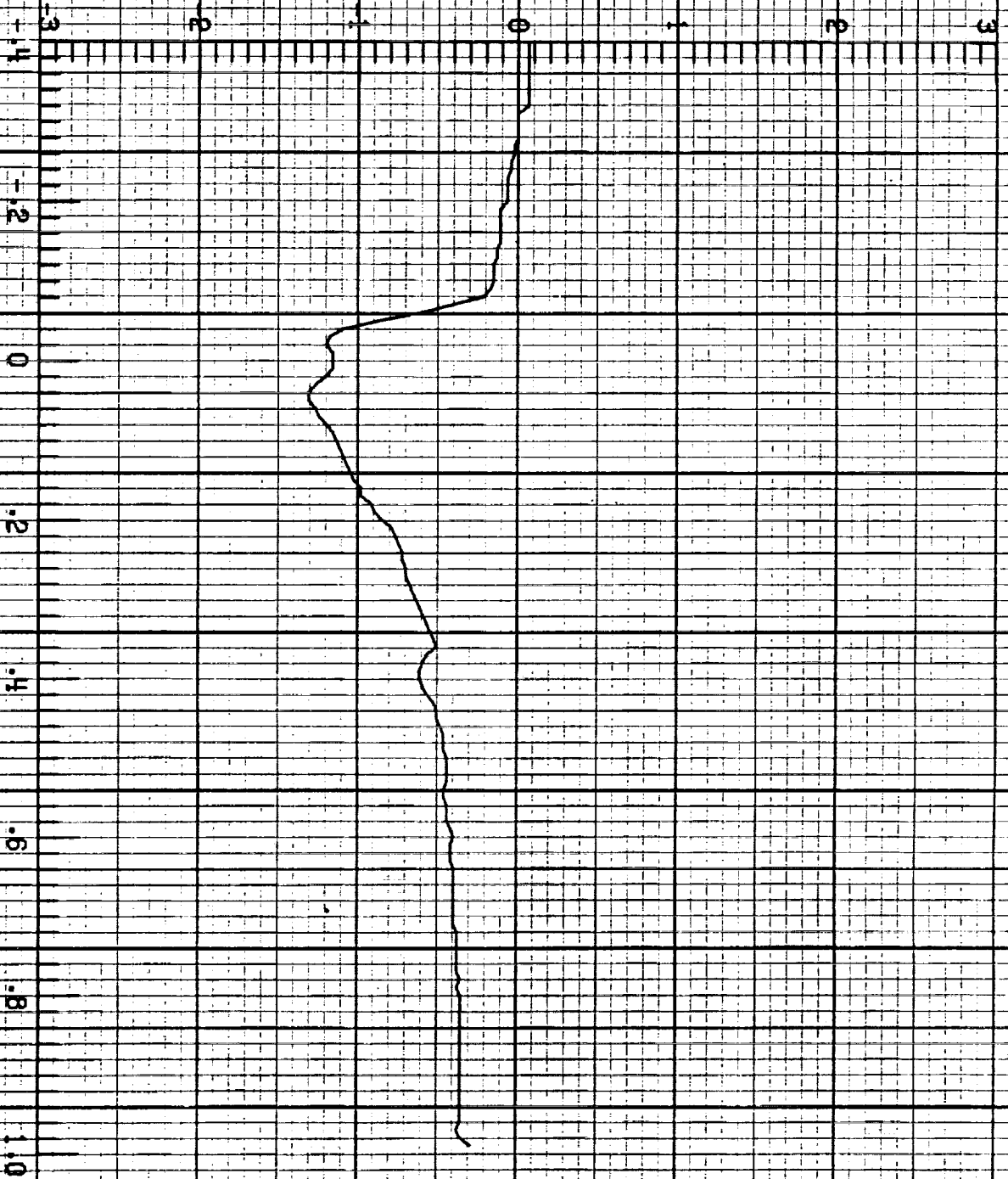
S.001

D_t A/m²

22:27:45.0
CHANNEL NO. 2.0

MICROSECONDS

1205



F-106 LIGHTNING/ 84-050

1 FC 2 RUN NO. 1

6.001

I A/s

24 x 10¹⁰

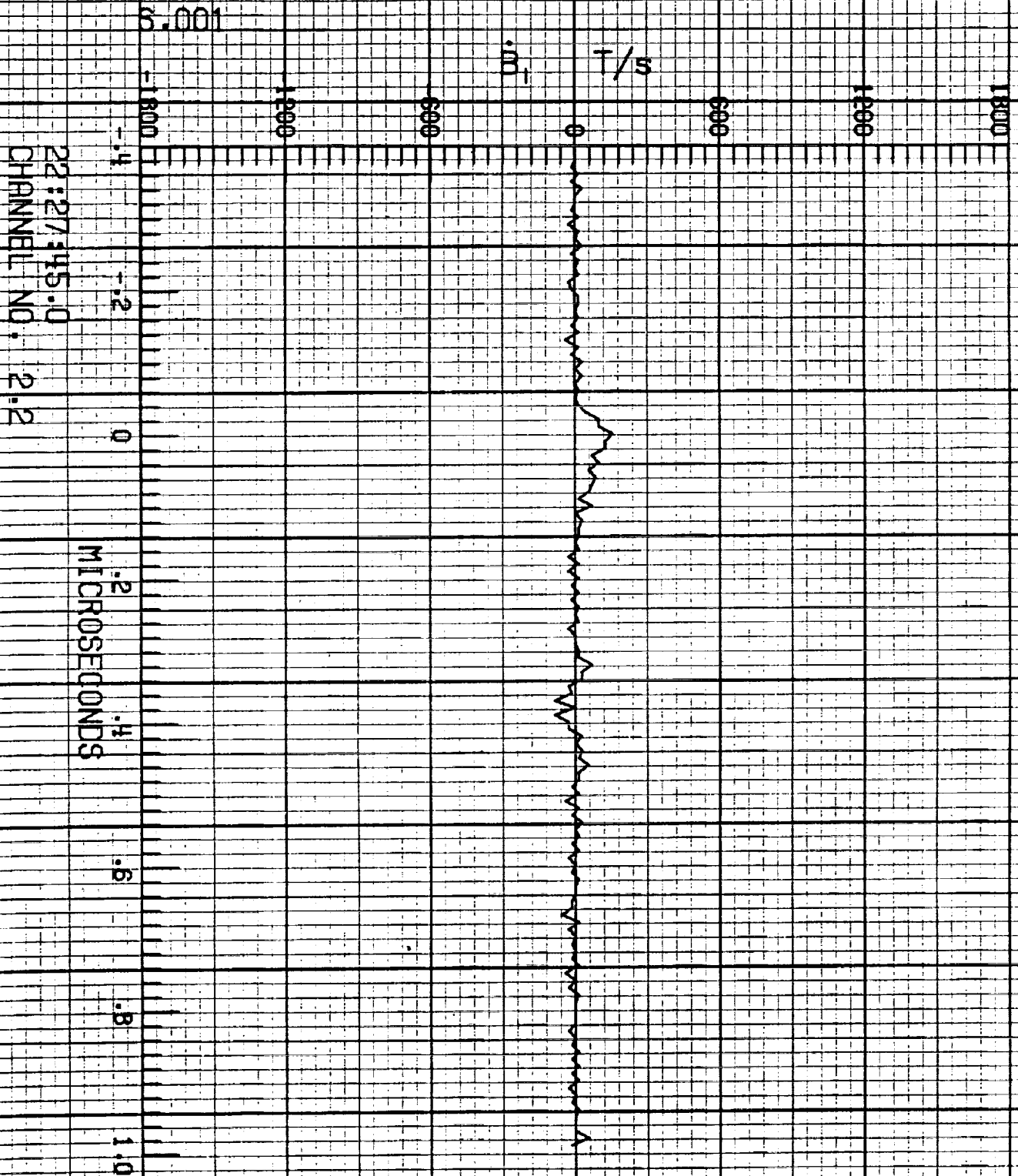
22:27:45.0
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LFC2 RUN NO. 1



F-106 LIGHTNING/ 84-050

EC 3 RUN NO. 1

5.001

\dot{D}_w A/m²

22:27:45.0
CHANNEL NO. 3.0

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

-106 LIGHTNING/ 84-050

ECB RUN NO. 1

5.001

\dot{D}_{wl} A/m²

22:27:45.0
CHANNEL NO. 3.1

MICROSECONDS

1209

F-106 LIGHTNING/ 84-050

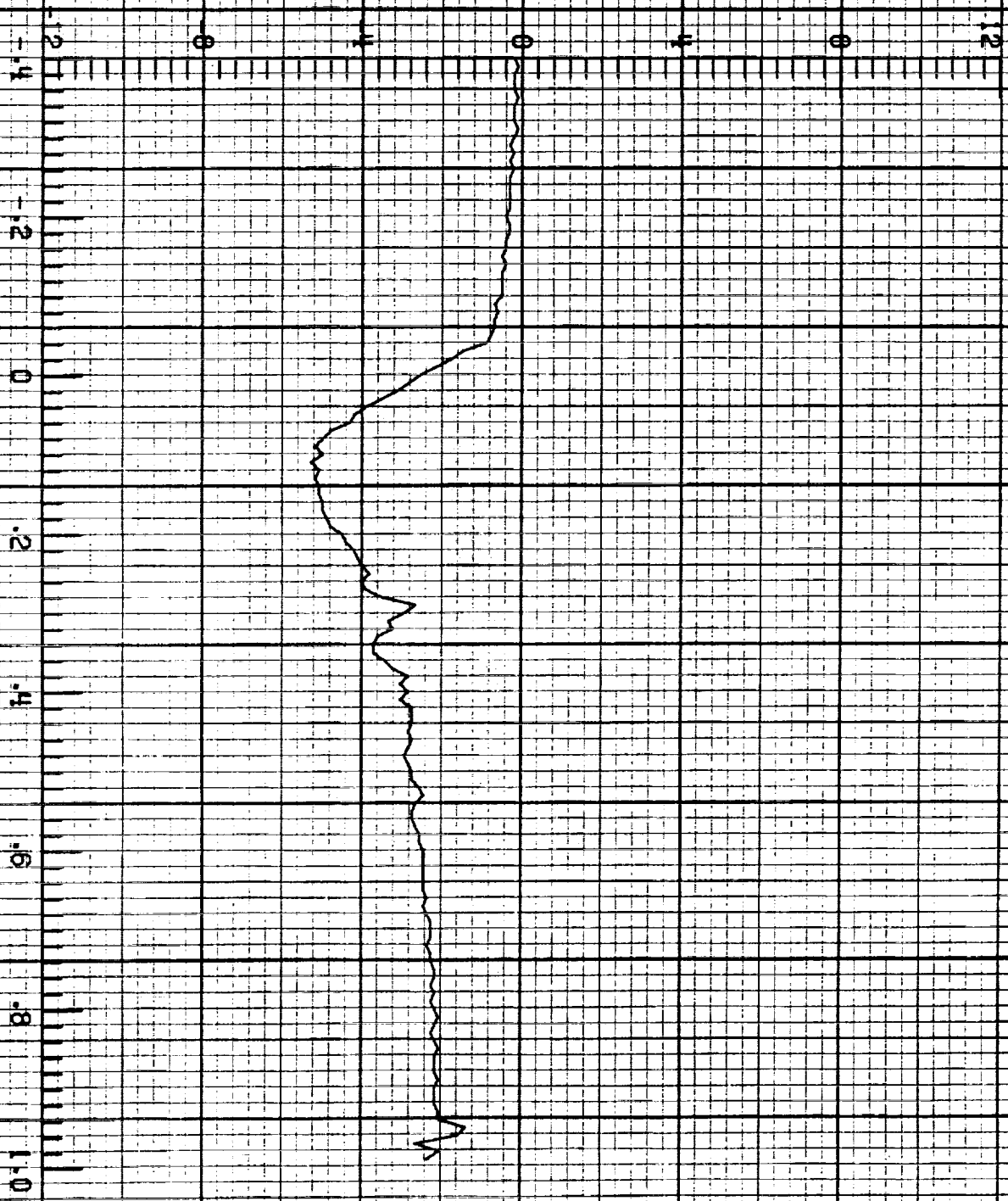
LFC 3 RUN NO. 1

5.001

D_r A/m²

22:27:45.0
CHANNEL NO. 3.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

1 FC 4 RUN NO. 1

5.001

TP 100

V₊ V₋

22:27:45.0
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-050

LEC4 RUN NO. 1

6.001

TP123 A

22:27:45.0
CHANNEL NO. 4.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

IFC1 RUN NO. 2

6.002

I_n A

22:32:55.9
CHANNEL NO. 1.1

MICROSECONDS

10^3

F-106 LIGHTNING/ 84-050

LFC1 RUN NO. 2

3.002

I_t A

24 x 10³

24

16

8

0

8

16

0

.8

1.6

2.4

3.2

4.0

4.8

MICROSECONDS

22:32:55.9
CHANNEL NO. 1.2

F-106 LIGHTNING/ 84-050

LEC2 RUN NO. 2

5.002

D_t A/m²

22:32:55.9
CHANNEL NO. 2.0

MICROSECONDS

1215

F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 2

6.002

i A/s

24 x 10¹⁰

22:32:55.9
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC2 RUN NO. 2

6.002

B₁ T/s

22:32:55.9
CHANNEL NO. 2.2

MICROSECONDS

1217

F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 2

5.002

\dot{D}_{wr} A/m²

22:32:55.9
CHANNEL NO. 3.0

MICROSECONDS

1218

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC3 RUN NO. 2

6.002

\dot{D}_{wl} A/m²

22:32:55.9
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

FC3 RUN NO. 2

6.002

\dot{D}_r A/m²

22:32:55.9
CHANNEL NO. 3.2

MICROSECONDS

F-106 LIGHTNING/ 84-050

LECH RUN NO. 2

5.002

TP 100

V₊

V

22:32:55.9
CHANNEL NO. 4.0

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 4 RUN NO. 2

8.002

TP123 A

22:32:55.9
CHANNEL NO. 4.2

MICROSECONDS

F-106 LIGHTNING/ 84-050

LFC1 RUN NO. 3

6.005

I_n

A

22:43:32.7
CHANNEL NO. 1.1

MICROSECONDS

10×10^3

F-106 LIGHTNING/ 84-050

LEC 1 RUN NO. 3

6.005

I_t A

22:43:32.7
CHANNEL NO. 1.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 3

6.005

D_t A/m²

22:43:32.7
CHANNEL NO. 2.0

MICROSECONDS

F-106 LIGHTNING/ 84-050

1 FC 2 RUN NO. 3

3.005

A/s

24×10^{10}

22:43:32.7
CHANNEL NO. 2.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

1 FC 2 RUN NO. 3

3.005

\dot{D}_1 T/s

22:43:32.7
CHANNEL NO. 2.2

MICROSECONDS

1227

F-106 LIGHTNING/ 84-050

LEC3 RIN NO. 3

3.005

\dot{D}_{wr} A/m²

24 16 8 0 8 16 24

22:43:32.7
CHANNEL NO. 3.0

MICROSECONDS

-.4
-.2
0
.2
.4
.6
.8
1.0

F-106 LIGHTNING/ 84-050

1 EC 3 RUN NO. 3

5.005

\dot{D}_v A/m²

22:43:32.7
CHANNEL NO. 3.1

MICROSECONDS

1229

F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 3

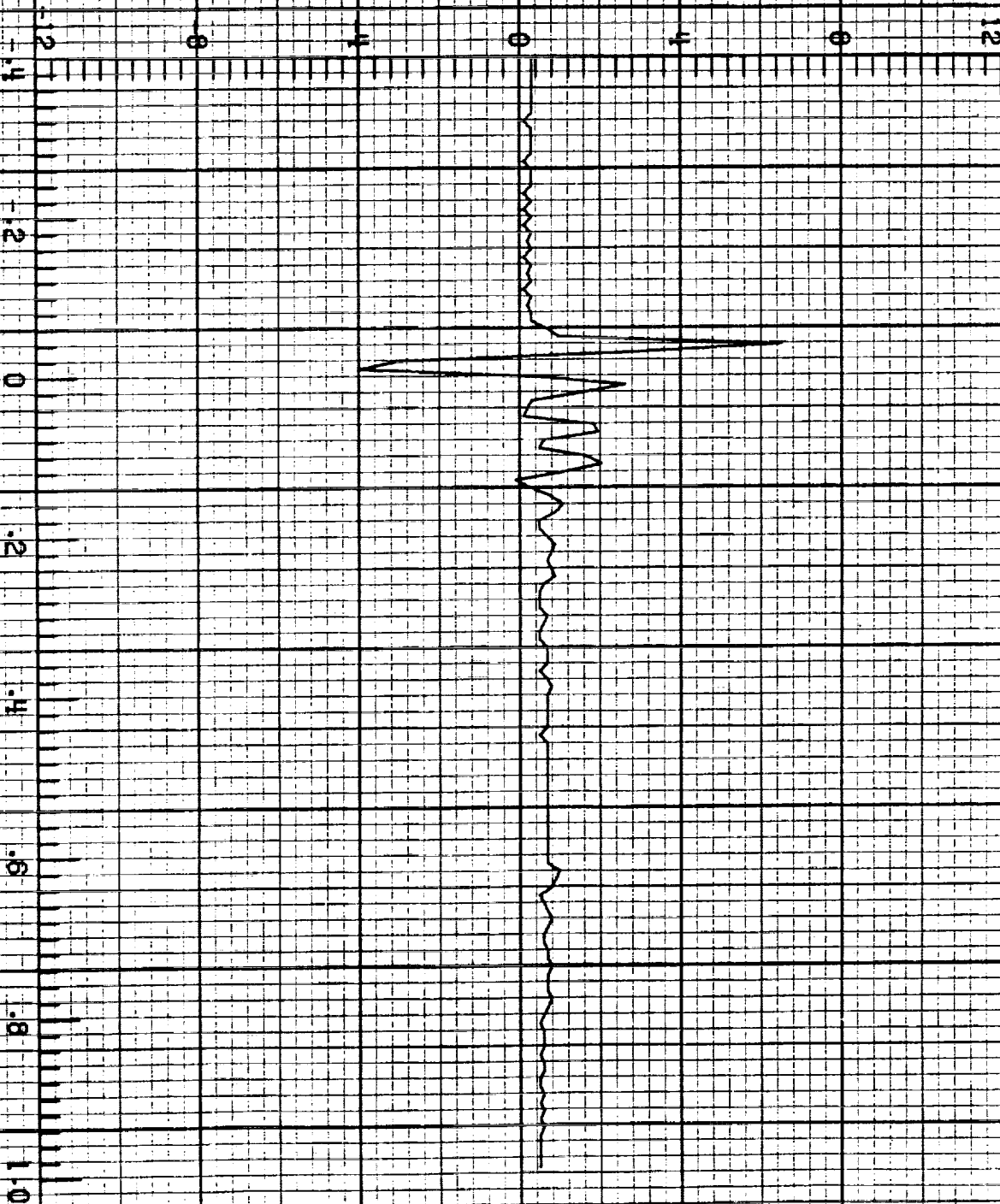
6.005

D_r A/m²

22:43:32.7
CHANNEL NO. 3.2

MICROSECONDS

1230



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 4 RUN NO. 3

6.005

TP 100

V_w

V

22:43:32.7
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-050

1 FC 4 RUN NO. 3

5.005

TP123 A

22:13:32.7
CHANNEL NO. 4.2

MICROSECONDS

-.5
-.4
-.3
-.2
-.1
0
.1
.2

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC.1 RUN NO. 4

6.007

I_n A

22:53:34.3
CHANNEL NO. 1.1

MICROSECONDS

18×10^3

F-106 LIGHTNING 84-050

1 FC 1 RUN NO. 4

6.007

I_t A

24 x 10³

22:53:34.3
CHANNEL NO. 1-2

MICROSECONDS

1234

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

FC2 RUN NO. 4

6.007

D_t A/m^2

22:53:34.3
CHANNEL NO. 2.0

MICROSECONDS

1235

F-106 LIGHTNING/ 84-050

IFC2 RUN NO. 4

6.007

i A/s

24 x 10¹⁰

-0.6

-0.4

-0.2

0

.2

.4

.6

.8

MICROSECONDS

22:53:34.3
CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

1 EC2 RUN NO. 4

3.007

B_1 T/s

22:53:34.3
CHANNEL NO. 2.2

MICROSECONDS

F-106 LIGHTNING/ 84-050

1 FC 3 RUN NO. 4

6.007

\dot{D}_{wr} A/m^2

22:53:34.3
CHANNEL NO. 3.0

MICROSECONDS

1238

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

1 EC.3 RUN NO. 4

6.007

\dot{D}_w A/m²

22:53:34.3
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

IEC3 RUN NO. 4

6.007

\dot{D}_r A/m²

22:53:34.3
CHANNEL NO. 3.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

IFC 4 RUN NO. 4

6.007

TP 100

V_v

V

22:53:34.3
CHANNEL NO. 4.0

MICROSECONDS

=106 LIGHTNING/ 84-050

LEC 4 RUN NO. 4

3.007

TP123 A

22:53:34.3
CHANNEL NO. 4.2

MICROSECONDS

V

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 1 RUN NO. 5

6.008

I_n A

22:58:45.0
CHANNEL NO. 1.1

MICROSECONDS

18×10^3

F-106 LIGHTNING/ 84-050

FC1 RUN NO. 5

6.009

I, A

22:58:45.0
CHANNEL NO. 1.2

MICROSECONDS

24 x 10³

F-106 LIGHTNING/ 84-050

1 EC 2 RUN NO. 5

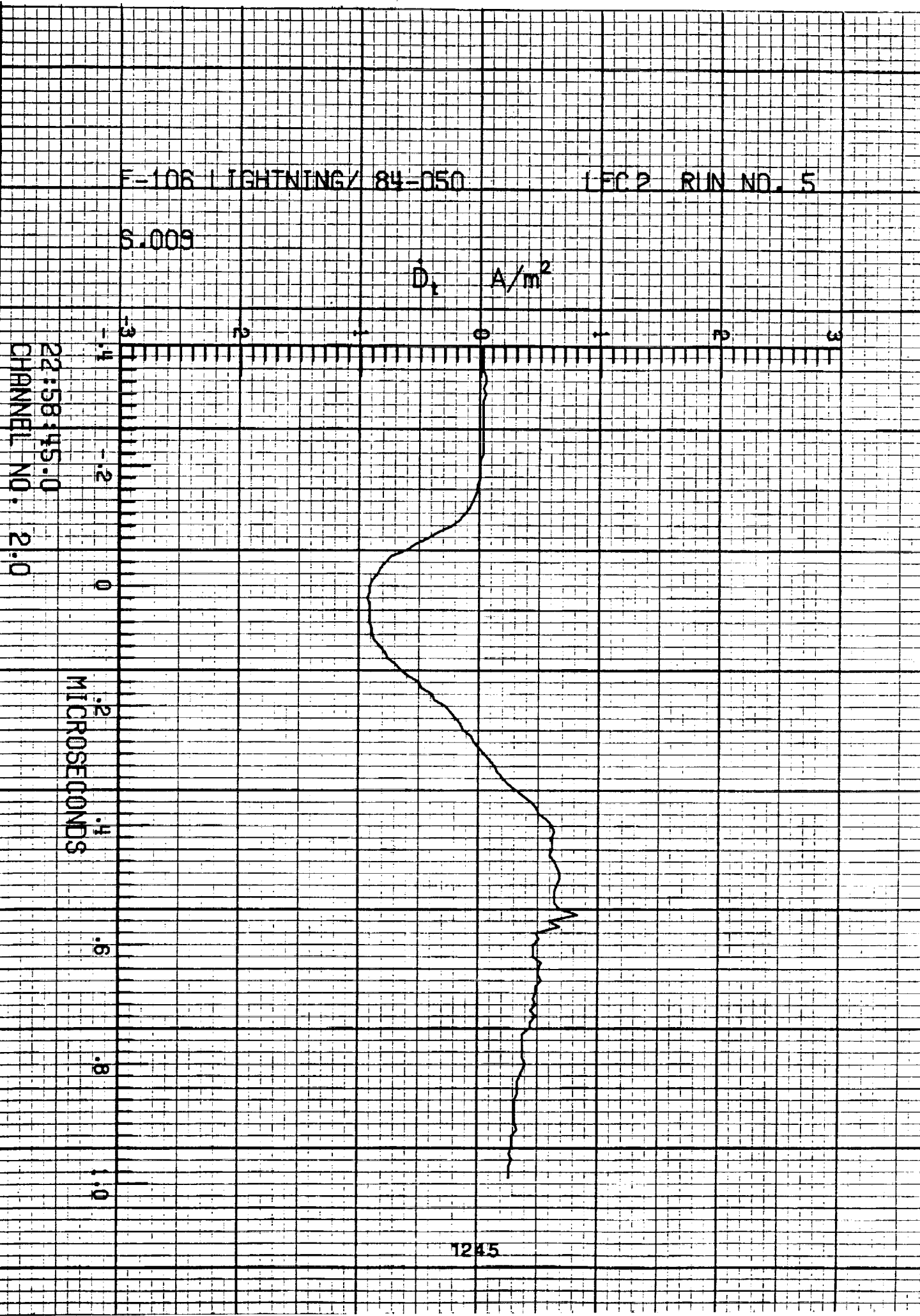
6.009

\dot{D}_t A/m²

22:58:45.0
CHANNEL NO. 2.0

MICROSECONDS

1245



F-106 LIGHTNING/ 84-050

LEC2 RUN NO. 5

5.009

I A/s

24 x 10¹⁰

22:58:45.0
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 5

3.000

B_1 T/s

22:58:45.0
CHANNEL NO. 2.2

MICROSECONDS

F-106 LIGHTNING/ 84-050

LFC3 RUN NO. 5

6.009

\dot{D}_{wr} A/m²

22:58:45.0
CHANNEL NO. 3.0

MICROSECONDS

1248

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

FC3 RUN NO. 5

6.003

\dot{D}_{eff} A/m^2

22:58:45.0
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 5

5.009

\bar{D}_r A/m²

22:58:45.0
CHANNEL NO. 3.2

MICROSECONDS

1250



ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-050

LEC 4 RUN NO. 5

6.000

TP 100

V_w V

22:58:45.0
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-050

LEC 4 RUN NO. 5

6.000

TP123

A

22:58:45.0
CHANNEL NO. 4.2

MICROSECONDS

1252

ORIGINAL PAGE IS
OF POOR QUALITY

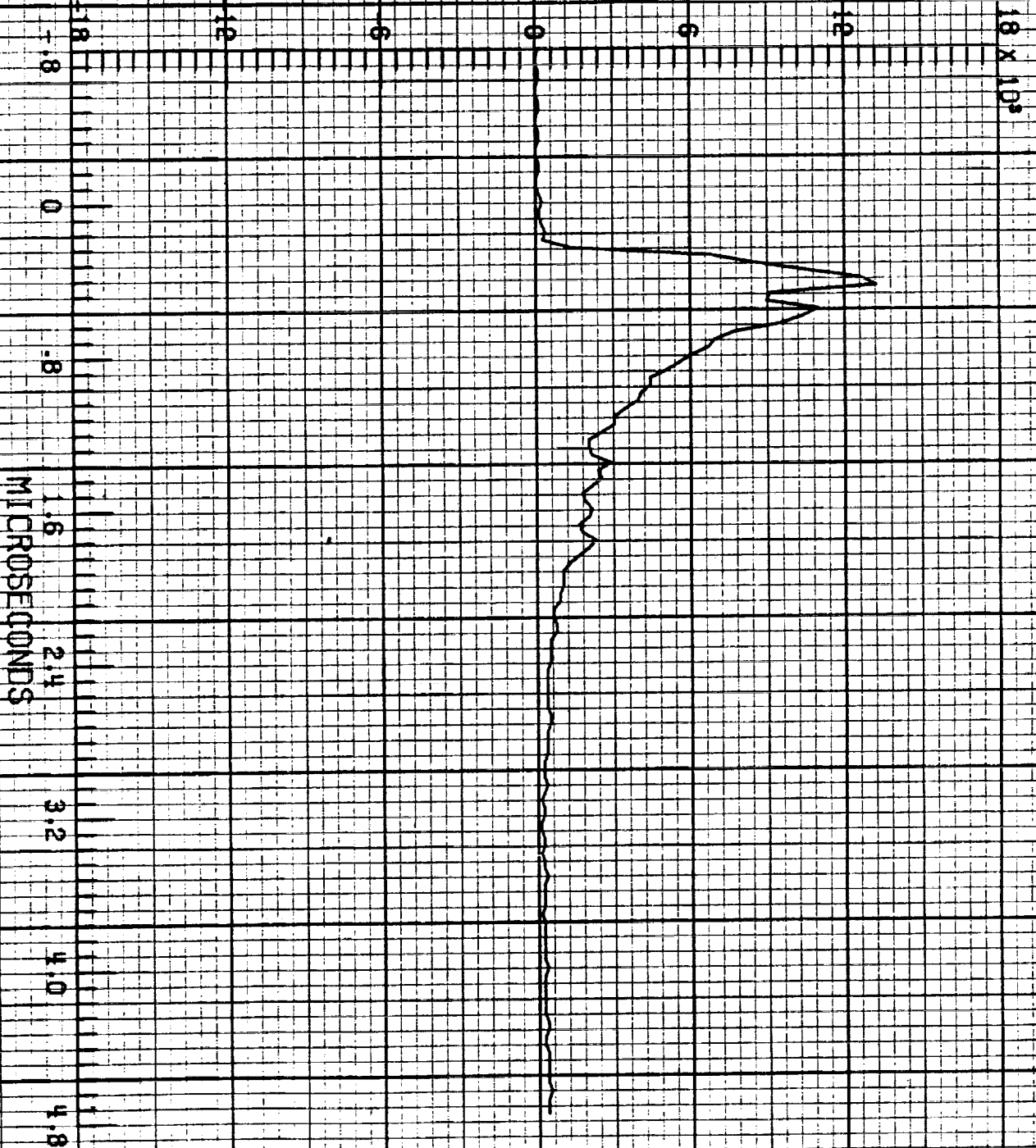
F-106 LIGHTNING/ 84-050

LEC 1 RUN NO. 6

6.011

I_n A

22:59:04.8
CHANNEL NO. 1.1



1253

F-106 LIGHTNING/ 84-050

LEC1 RUN NO. 6

6.011

T₁ A

24 x 10³

22:59:04.8
CHANNEL NO. 1.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC2 RUN NO. 6

6.011

D_1 A/m²

22:59:04.8
CHANNEL NO. 2.0

MICROSECONDS

1255

F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 6

6.011

$\frac{1}{t}$ A/s

24×10^{10}

-4

-2

0

.2

.4

.6

.8

1.0

MICROSECONDS

22:59:04.8
CHANNEL NO. 2.1

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

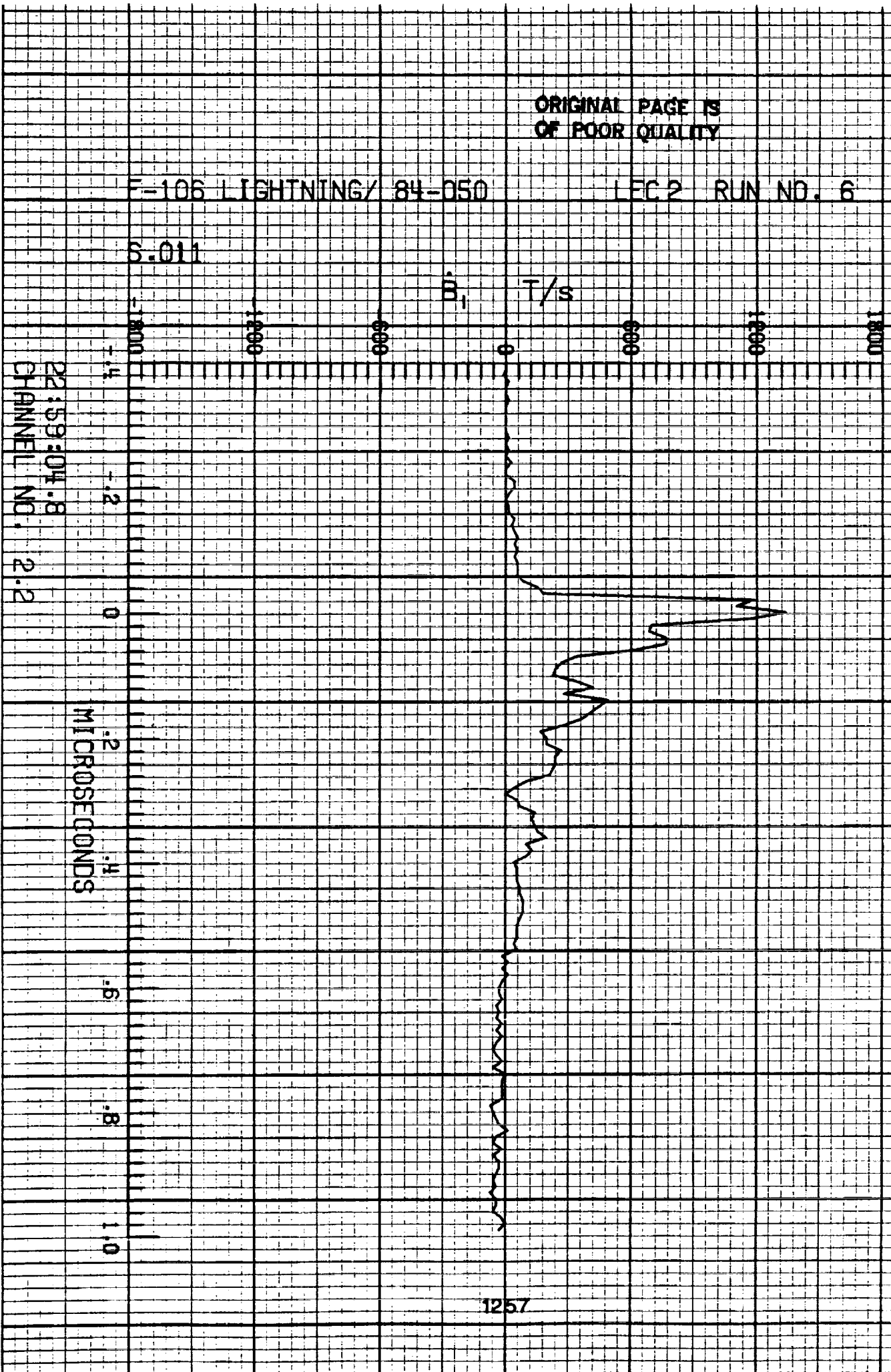
LEC 2 RUN NO. 6

S.011

\dot{B}_1 T/s

22:59:04.8
CHANNEL NO. 2.2

MICROSECONDS



F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 6

6.011

\dot{D}_{wr} A/m²

24
16
8
0
-8
-16
-24

-2

0

.2

.4

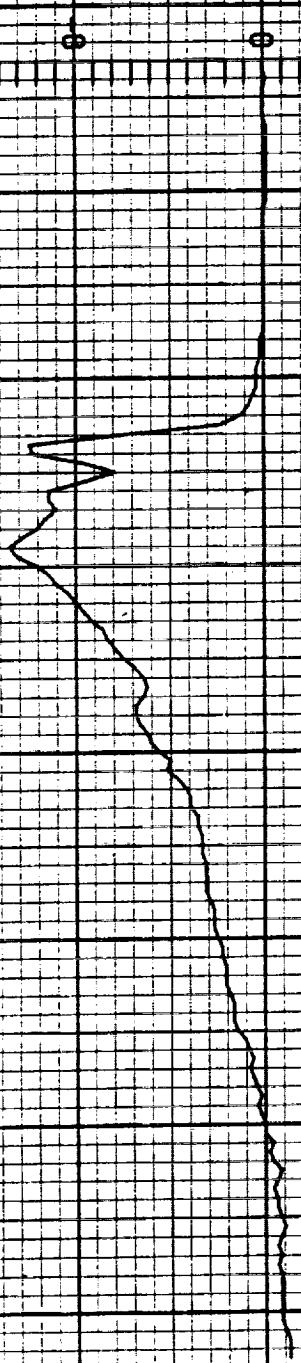
.6

.8

1.0

MICROSECONDS

22:59:04.8
CHANNEL NO. 3.0



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 6

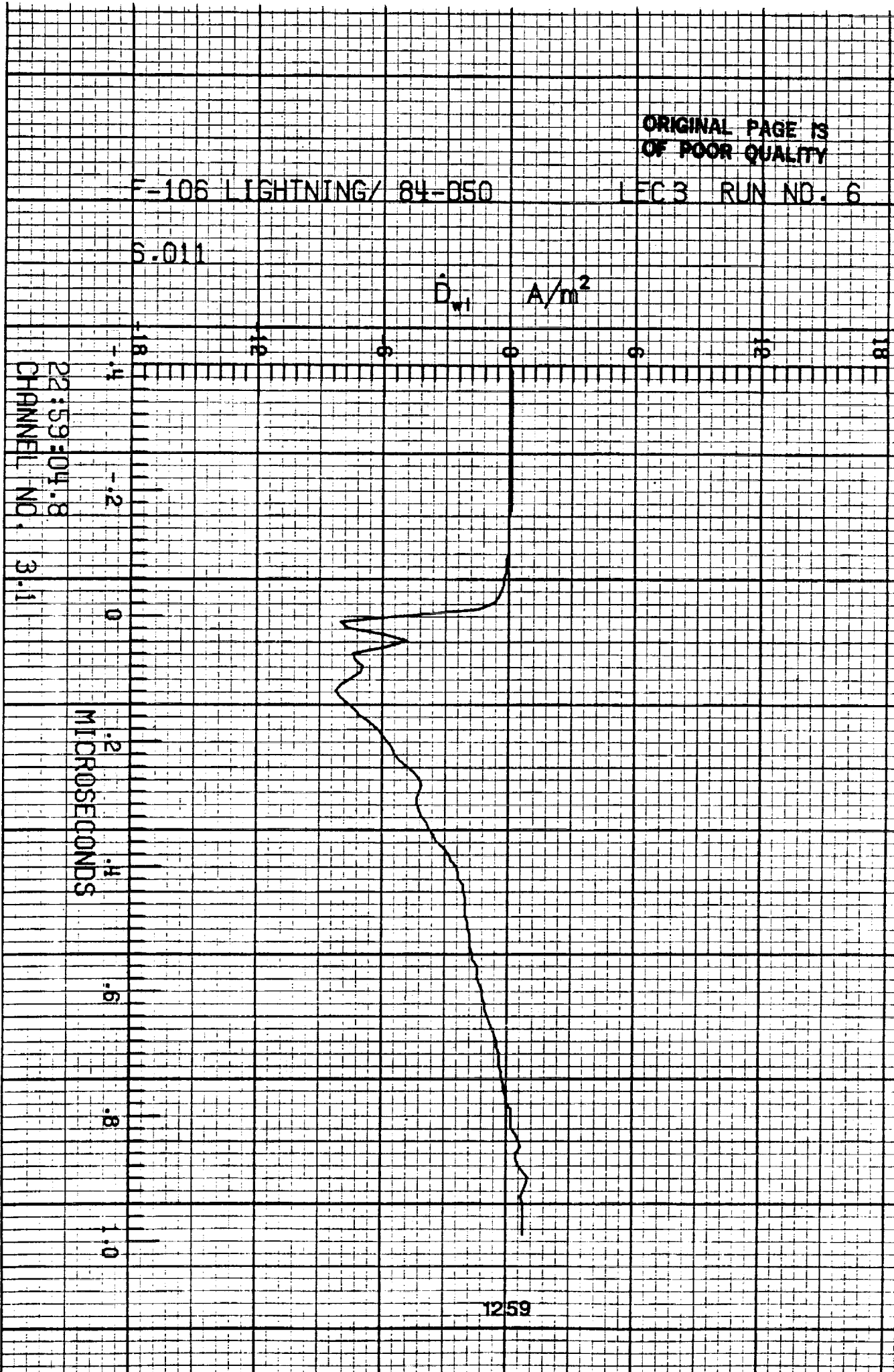
S.011

\dot{D}_w A/m²

22:59:04.8
CHANNEL NO. 3.1

MICROSECONDS

1259



F-106 LIGHTNING/ 84-050

LEC3 RUN NO. 6

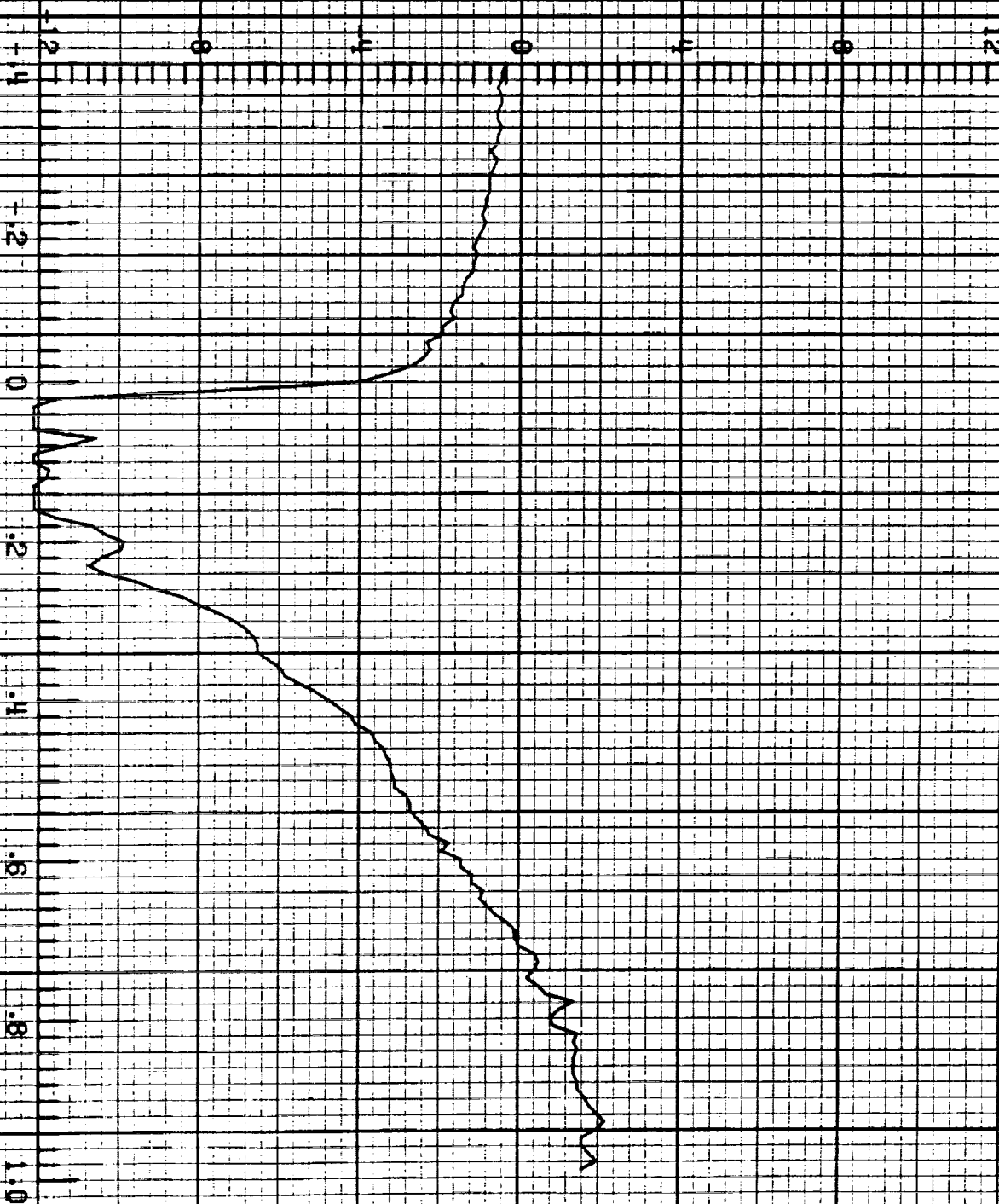
6.011

\dot{D}_r A/m²

22:59:04.8
CHANNEL NO. 3.2

MICROSECONDS

1260



ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-050

LEC 4 RIN NO. 6

8.011

TP 100

V_v V

22:59:04.8
CHANNEL NO. 4.0

MICROSECONDS

1261

F-106 LIGHTNING/ 84-050

LECH RUN NO. 6

8.011

TP123 A

22:59:04.8
CHANNEL NO. 4.2

MICROSECONDS

-3
-2.5
-2
-1.5
-1
-0.5
0
0.5
1
1.5
2
2.5
3

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

1 FC 1 RUN NO. 7

8.016

T_r A

22:59:23.2
CHANNEL NO. 1.1

MICROSECONDS

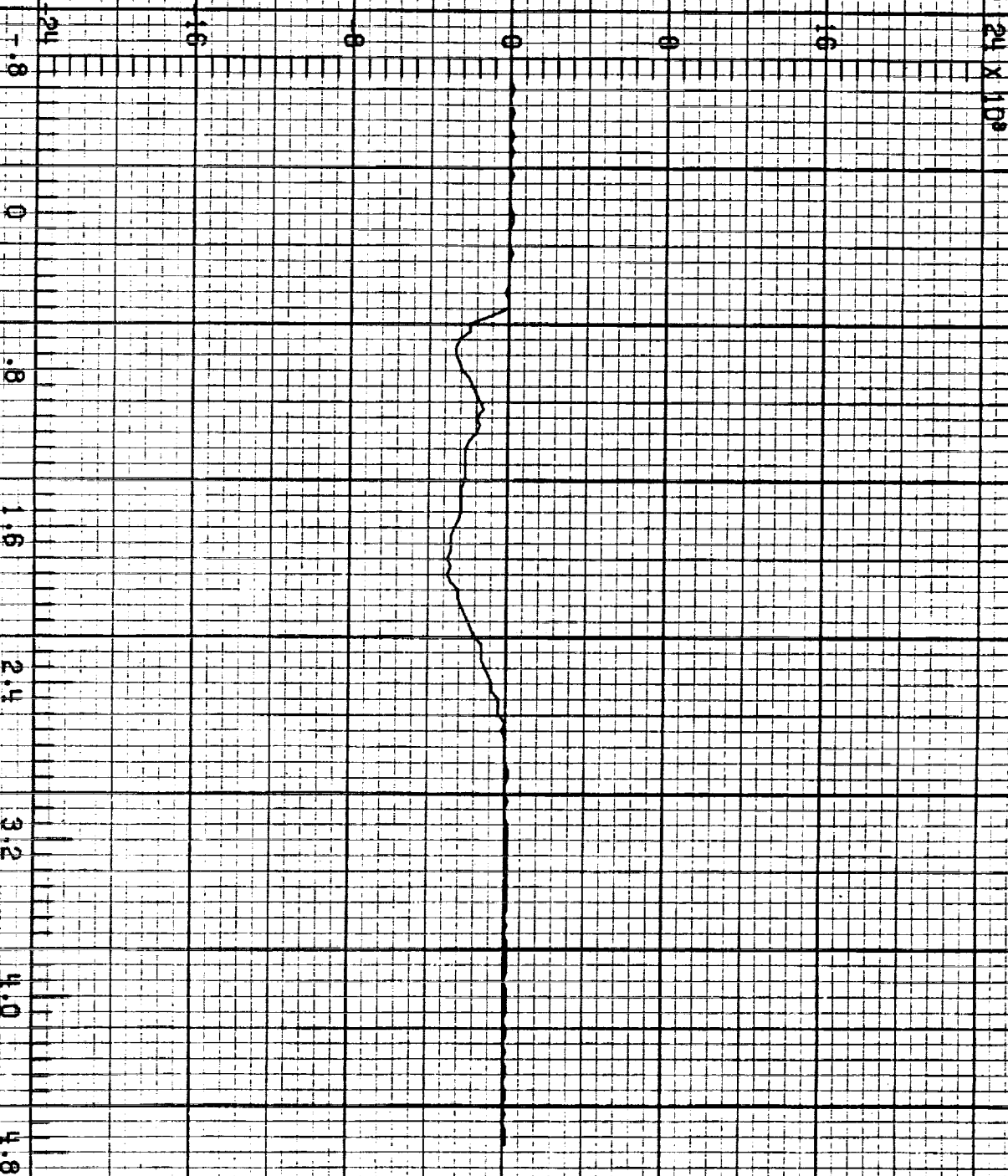
1263

F-106 LIGHTNING/ 84-050

LEC 1 RUN NO. 7

5.016

I_t A



22:59:23.2
CHANNEL NO. 1.2

ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-050

LFC 2 RUN NO. 7

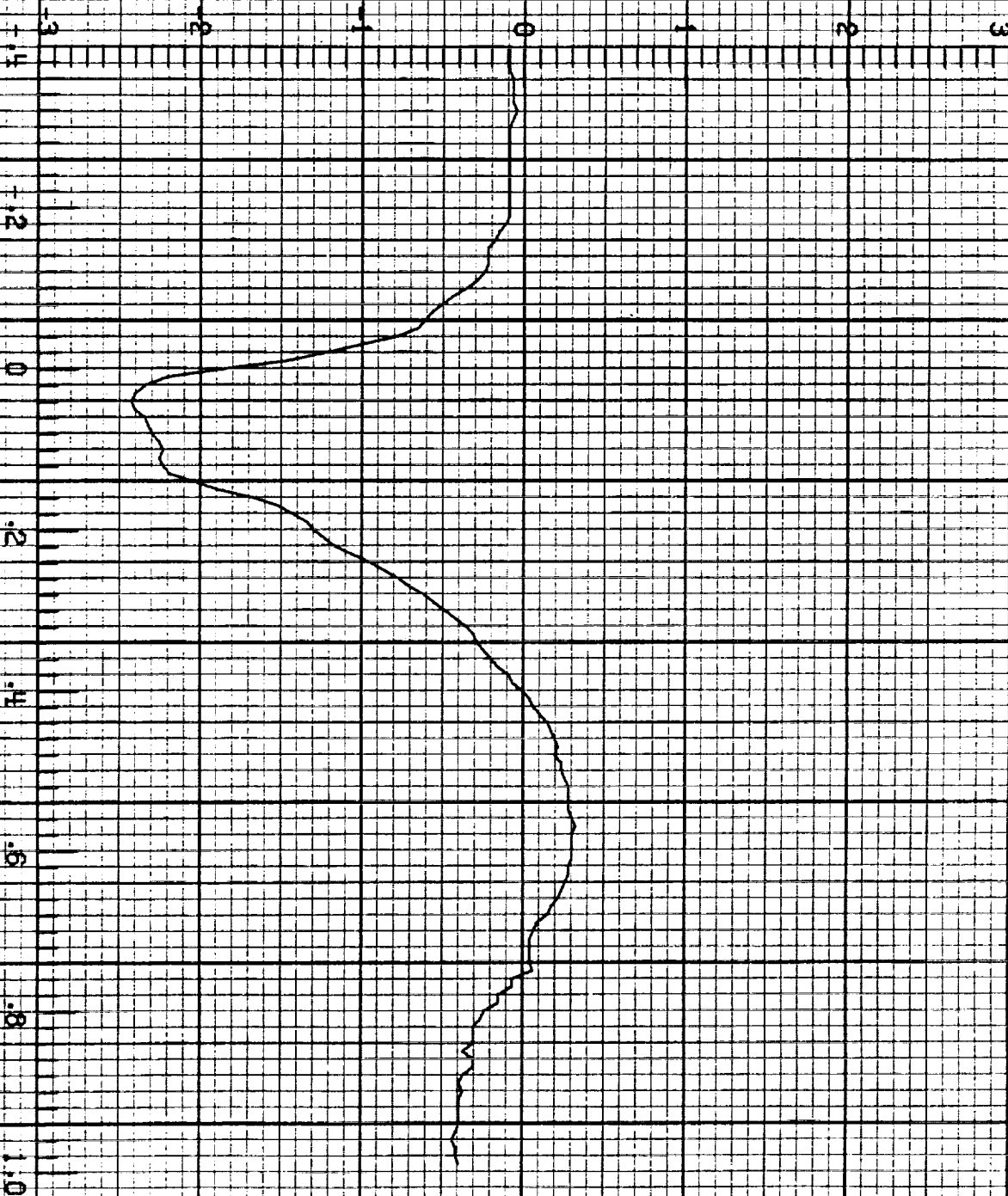
6.016

D_t A/m^2

22:59:23.2
CHANNEL NO. 2.0

MICROSECONDS

1265



F-106 LIGHTNING/ 84-050

IFC2 RUN NO. 7

6.016

\dot{I} A/s

24 X 10¹⁰

24
16
8
0
-8
-16
-24

22:59:23.2
CHANNEL NO. 2.1

MICROSECONDS

.2
.4
.6
.8
1.0

ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-050

LEC 2 RUN NO. 7

8.016

R_1 T/s

22:59:23.2
CHANNEL NO. 2.2

MICROSECONDS

1267

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

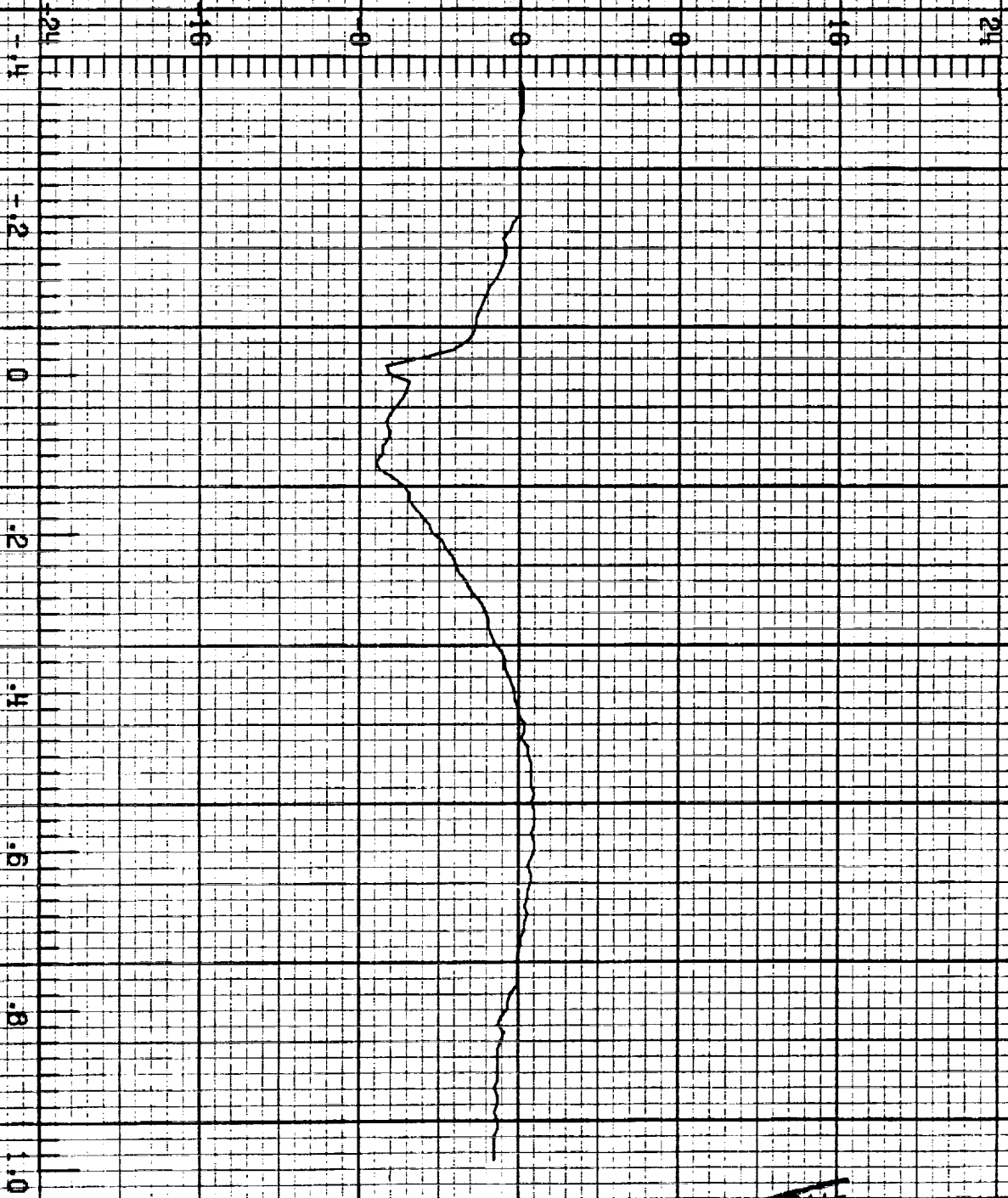
LEC 3 RUN NO. 7

6.016

\dot{D}_{wr} A/m²

22:59:23.2
CHANNEL NO. 3.0

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

1 EC3 RUN NO. 7

6.016

\hat{D}_{w1}

A/m²

22:59:23.2
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

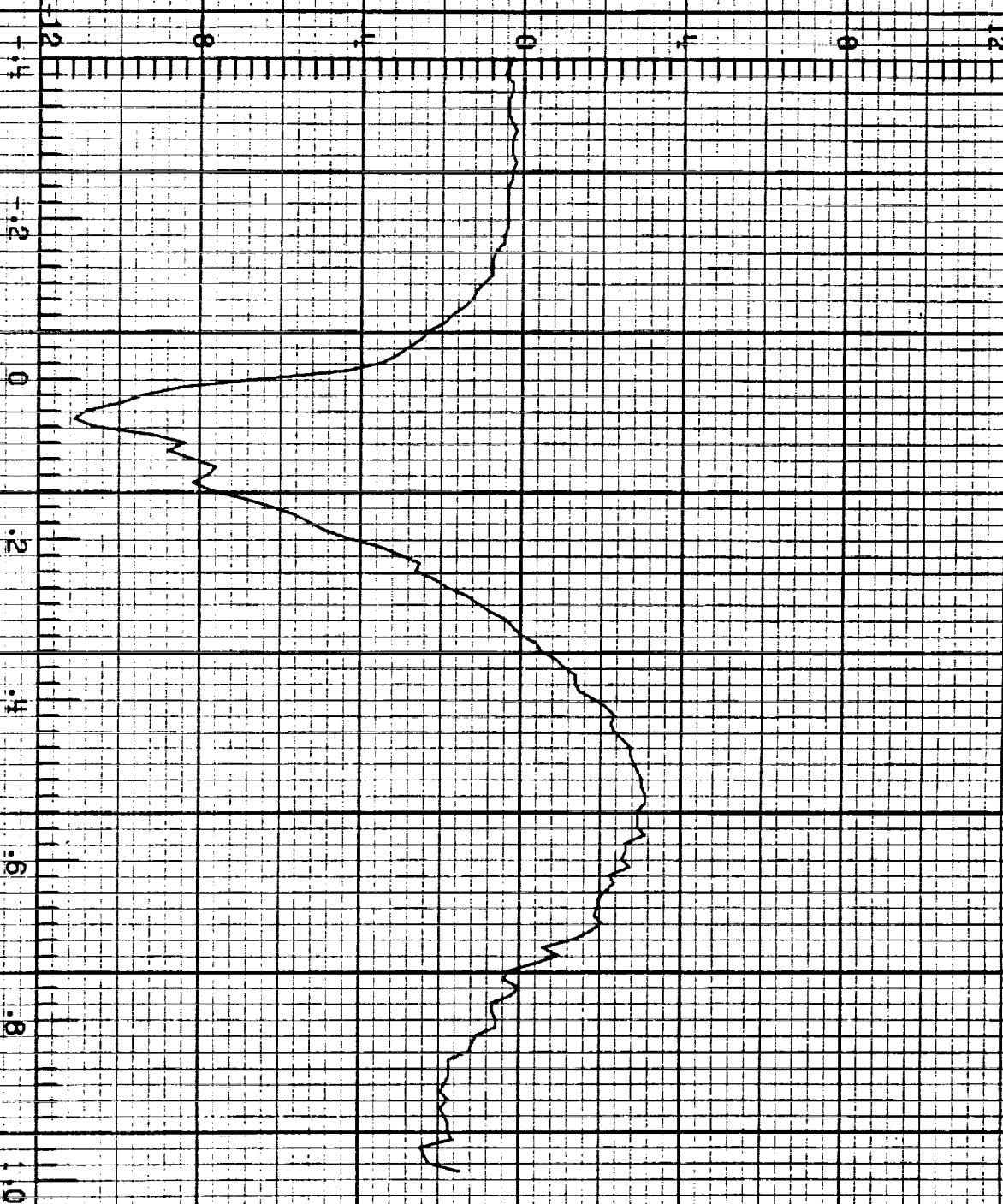
LEC 3 RUN NO. 7

S.016

\dot{D}_r A/m²

22:59:23.2
CHANNEL NO. 3.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-105 LIGHTNING/ 84-050

IFC# RUN NO. 7

5.016

TP 100

V

V

30 20 10 0 10 20 30

-.5

-.4

-.3

-.2

-.1

0

.1

.2

MICROSECONDS

22:59:23.2

CHANNEL NO. 4.0

F-106 LIGHTNING/ 84-050

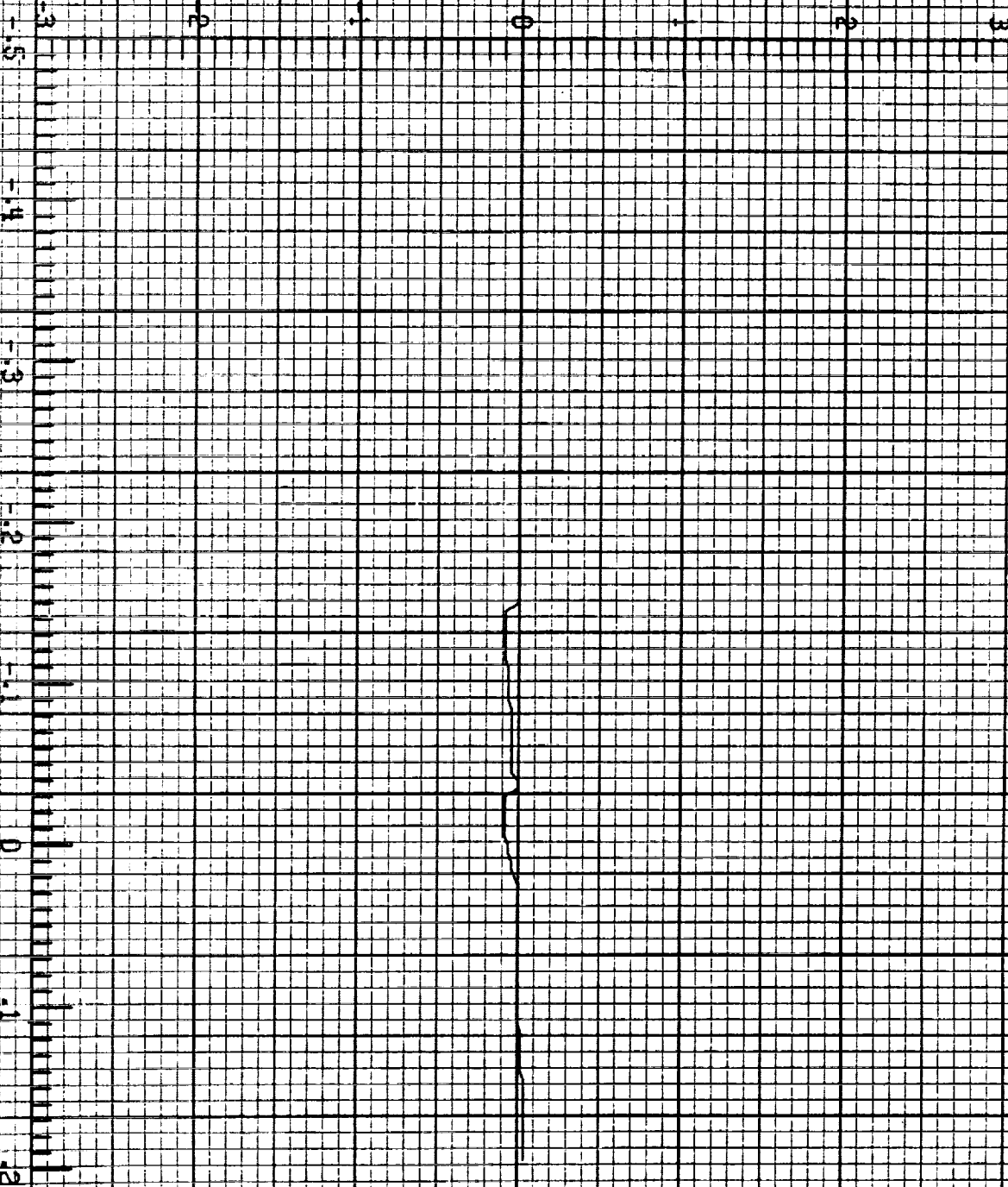
LECH RUN NO. 7

3.013

TP123 A

22:59:23.2
CHANNEL NO. 4.2

MICROSECONDS



P-106 LIGHTNING/ 84-050

LEC1 RUN NO. 8

6.020

I_n A

23:04:43.6
CHANNEL NO. 1.1

MICROSECONDS

10×10^3

1273

F-106 LIGHTNING/ 84-050

LFC1 RUN NO. 8

6.020

I_t A

24 x 10³

23:04:43.6
CHANNEL NO. 1.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

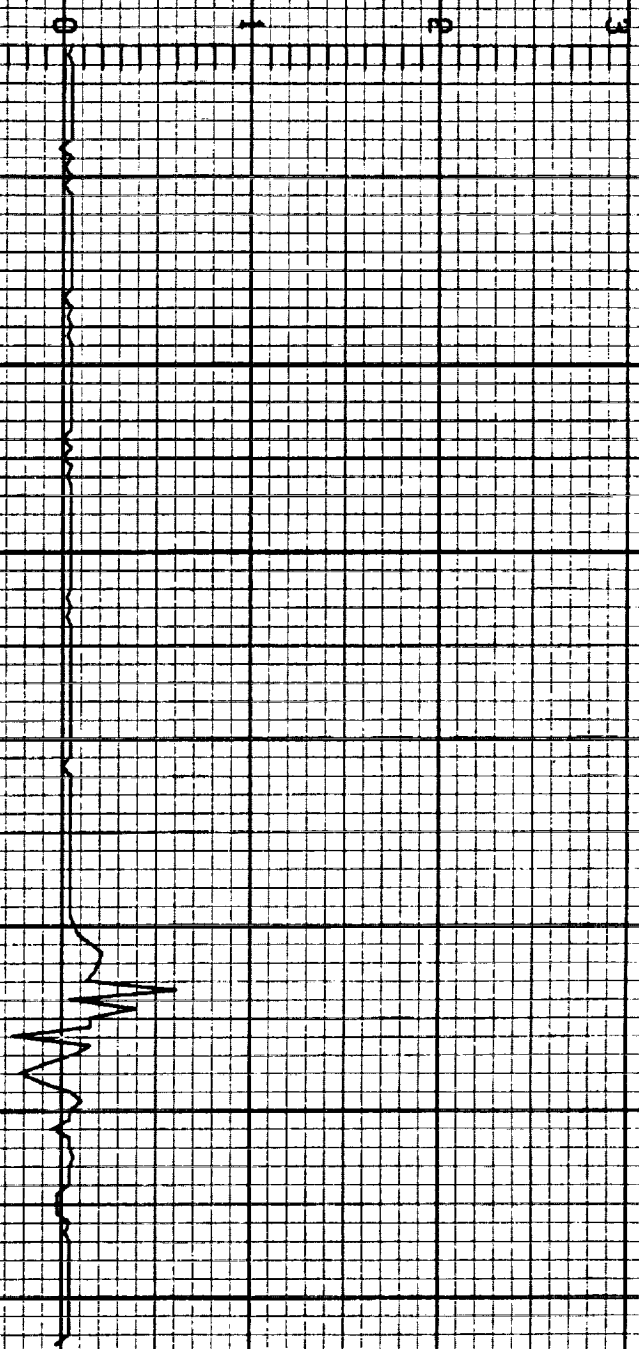
LEC 2 RUN NO. 8

S.020

\dot{D}_t A/m²

23:04:43.8
CHANNEL NO. 2.0

-1.0
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
MICROSECONDS

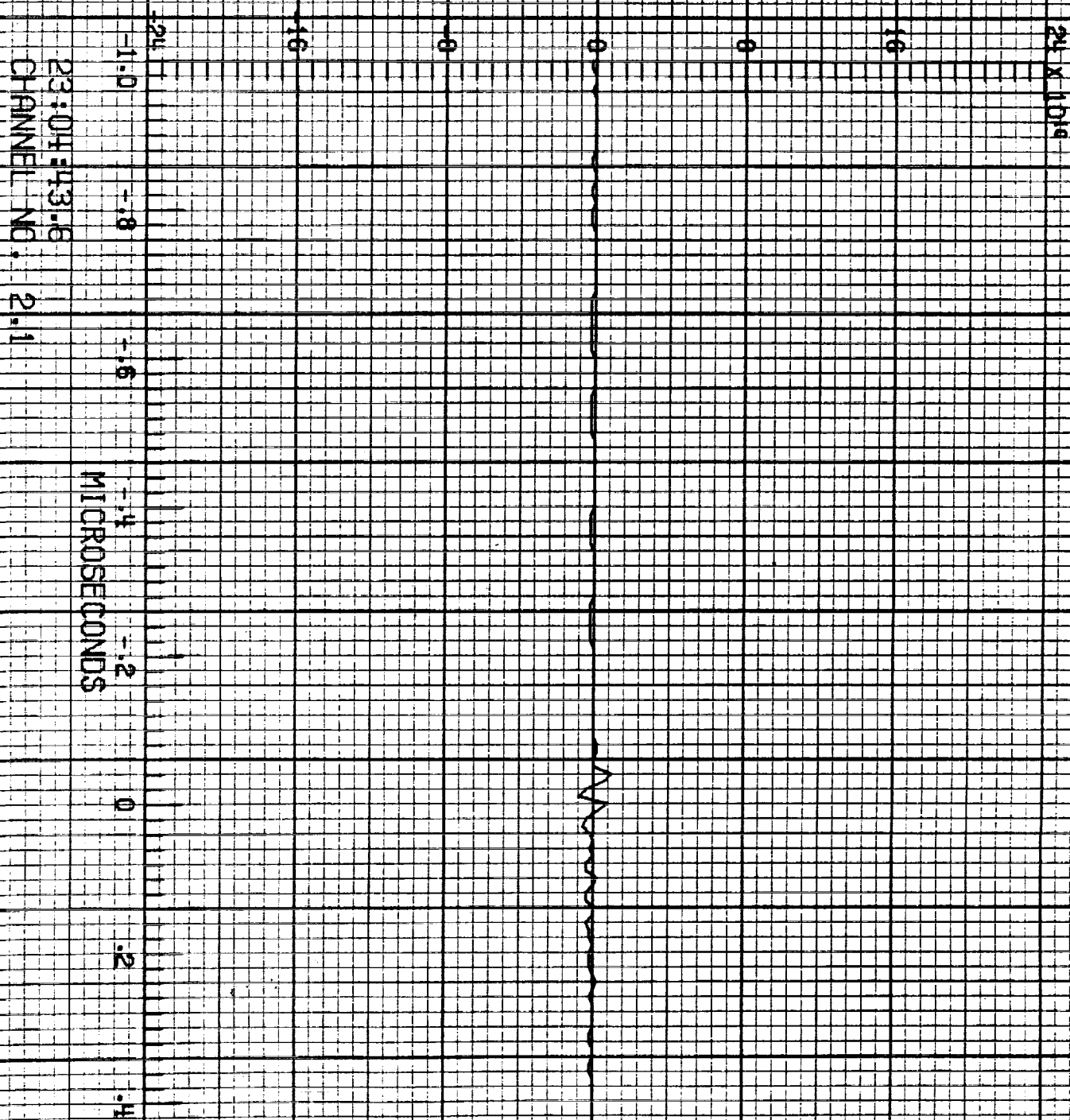


F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 8

S.020

$\frac{1}{t}$ A/s



F-106 LIGHTNING/ 84-050

1 EC2 RUN NO. 8

6.020

\dot{B}_1 T/s

23:04:43.8
CHANNEL NO. 2.2

MICROSECONDS

C-4

ORIGINAL PAGE IS
OF POOR QUALITY

1277

F-106 LIGHTNING/ 84-050

IFC3 RUN NO. 8

6.020

\dot{D}_{wr} A/m²

23:04:43.6
CHANNEL NO. 3.0

MICROSECONDS

1278

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 8

S.020

\dot{D}_{wl} A/m²

23:04:43.6
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

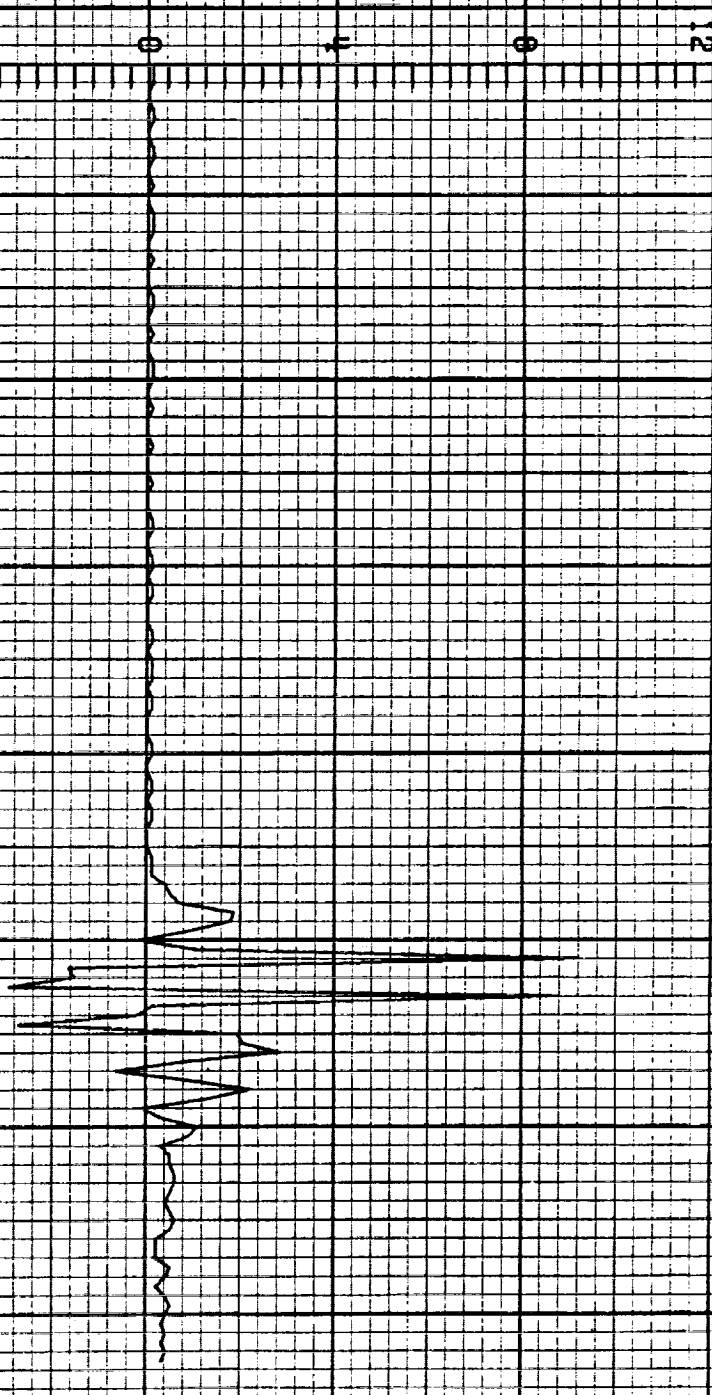
LEC.3 RUN NO. 8

6.020

\dot{D}_r A/m²

23:04:43.6
CHANNEL NO. 3.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 4 RUN NO. 8

6.020

TP 100

V₊ V

23:04:43.8
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-050

LEC 4 RUN NO. 8

5.020

TP123

A

23:04:43.8
CHANNEL NC, 4.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-050

LFC 1 RUN NO. 9

6.022

T_n A

23:05:26.2
CHANNEL NO. 1.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

LEC1 RUN NO. 9

5.022

I_t A

24

16

8

0

8

16

24 X 10³

0.8

0

0.8

1.6

2.4

3.2

4.0

4.8

MICROSECONDS

23:05:26.2
CHANNEL NO. 1.2

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

FC2 RUN NO. 9

6.022

D_1 A/m^2

23:05:26.2
CHANNEL NO. 2.0

MICROSECONDS

F-106 LIGHTNING/ 84-050

LEC2 RUN NO. 9

6.022

\dot{I} A/s

24×10^{14}

23:05:26.2
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

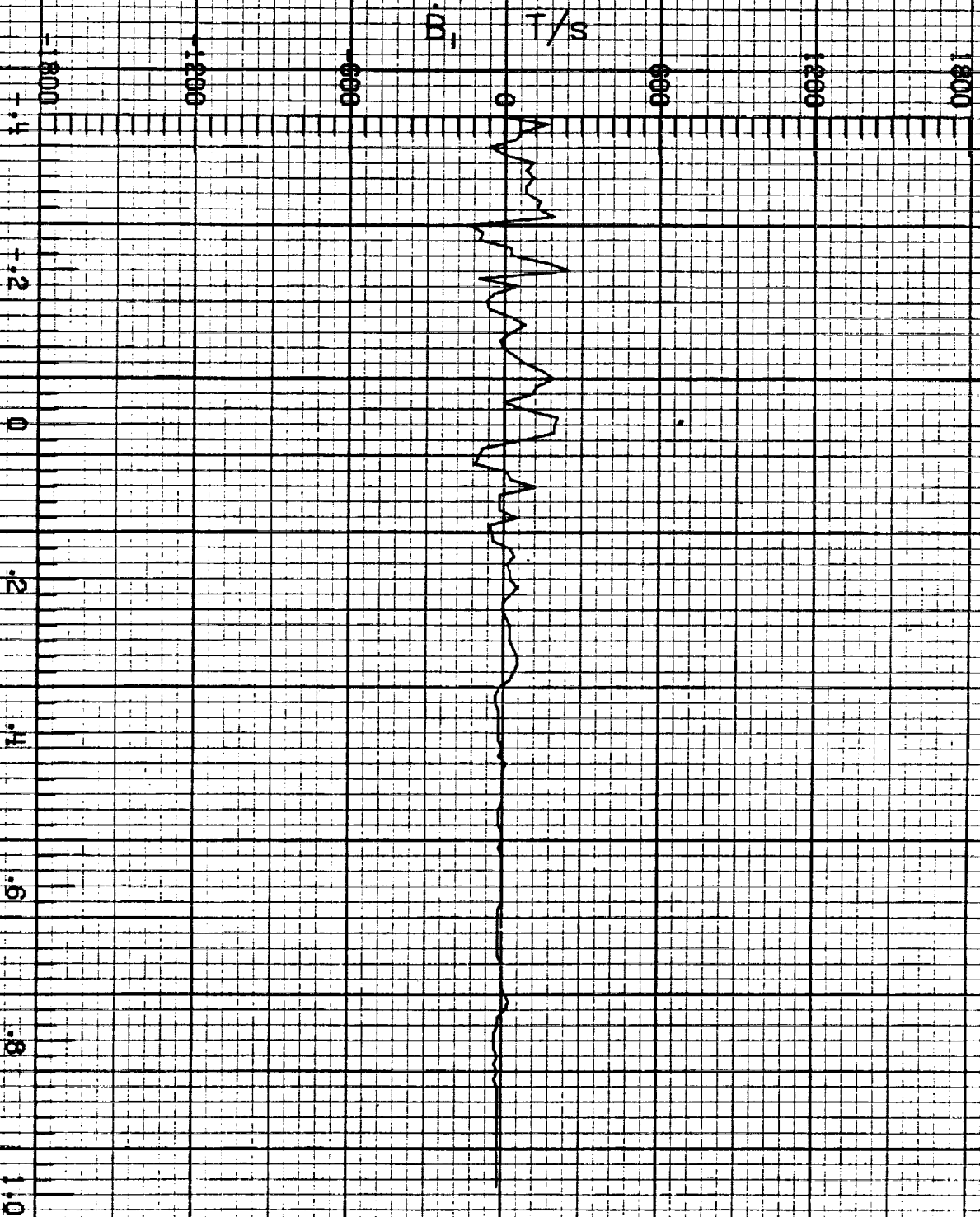
F-106 LIGHTNING/ 84-050

1 FC 2 RUN NO. 9

6.022

23:05:26.2
CHANNEL NO. 2.2

MICROSECONDS



F-106 LIGHTNING/ 84-050

LEC3 RUN NO. 9

5.022

\dot{D}_{wr} A/m²

23:05:26.2
CHANNEL NO. 3.0

MICROSECONDS

1288

F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 9

5.022

\dot{D}_{wl} A/m²

23:05:26.2
CHANNEL NO. 3.1

MICROSECONDS

1289

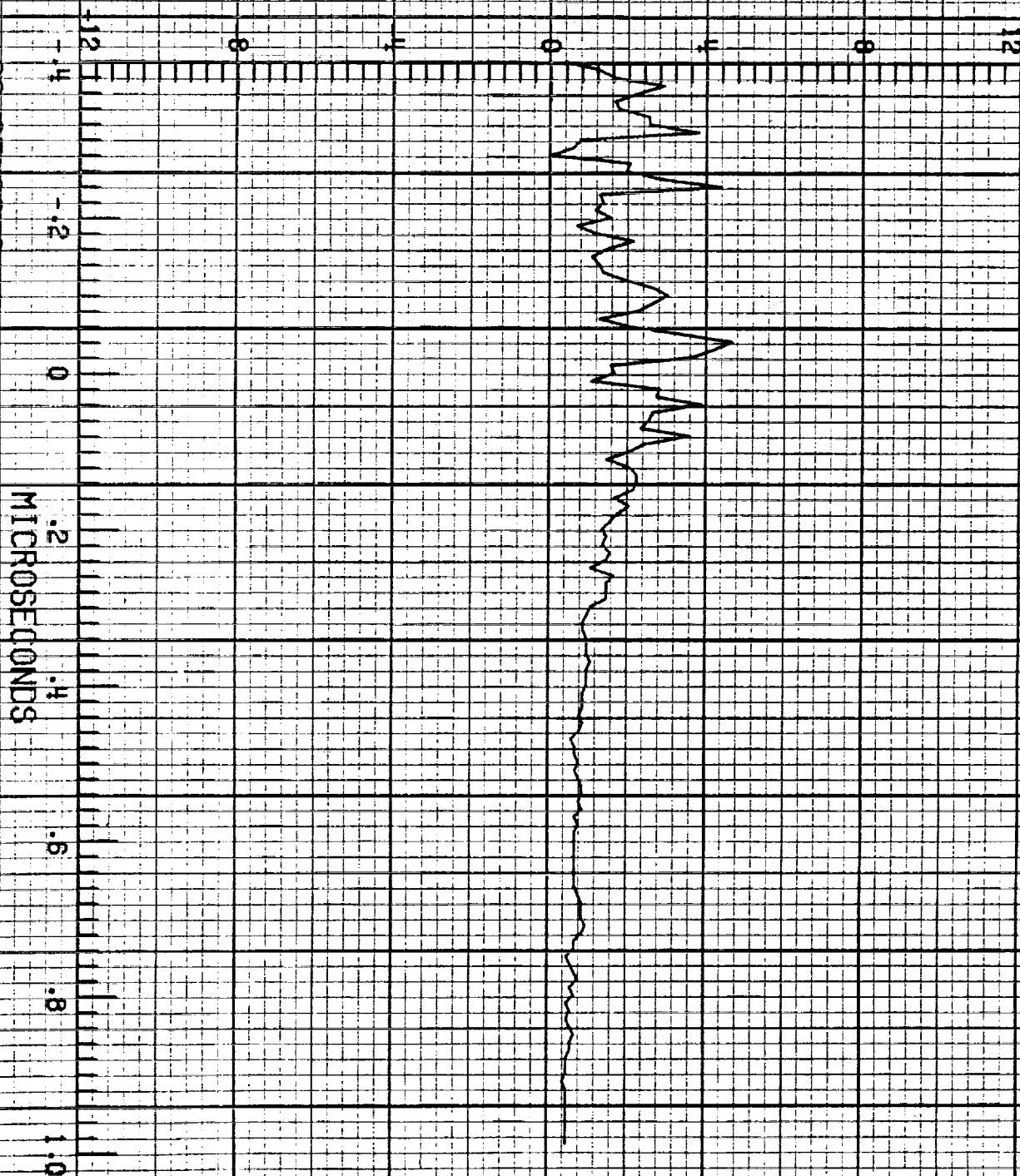
F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 9

S.022

\dot{D}_r A/m²

23:05:26.2
CHANNEL NO. 3.2



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

1 FC 4 RUN NO. 9

6.022

TP 100

V

V

23:05:26.2
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-050

TECH RUN NO. 9

6.022

TP123 A

23:05:26.2
CHANNEL NO. #.2

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 1 RUN NO. 10

5.025

I_n A

23:05:49.5
CHANNEL NO. 1.1

MICROSECONDS

1293

F-106 LIGHTNING/ 84-050

IFC1 RUN NO. 10

6.025

I, A

24 x 10³

24

0

.8

MICROSECONDS

1.6

2.4

3.2

4.0

4.8

23:05:49.5
CHANNEL NO. 1.2

F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 10

S.025

D_t A/m²

23:05:49.5
CHANNEL NO. 2.0

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F=106 LIGHTNING/ 84-050

LFC2 RUN NO. 10

5.025

\dot{I} A/s

24 X 10¹⁰

23:05:49.5
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 10

6.025

\bar{u}_1 τ/s

23:05:49.5
CHANNEL NO. 2.2

MICROSECONDS

F-106 LIGHTNING/ 84-050

IFC 3 RUN NO. 10

5.025

\dot{D}_{wr}

A/m^2

24 18 12 6 0 -6 -12 -18 -24

0.4

0.2

0

0.2

0.4

0.6

0.8

1.0

MICROSECONDS

23:05:49.5
CHANNEL NO. 3.0

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 10

6.025

\dot{D}_{wl} A/m^2

23:05:49.5
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

1 FC3 RUN NO. 10

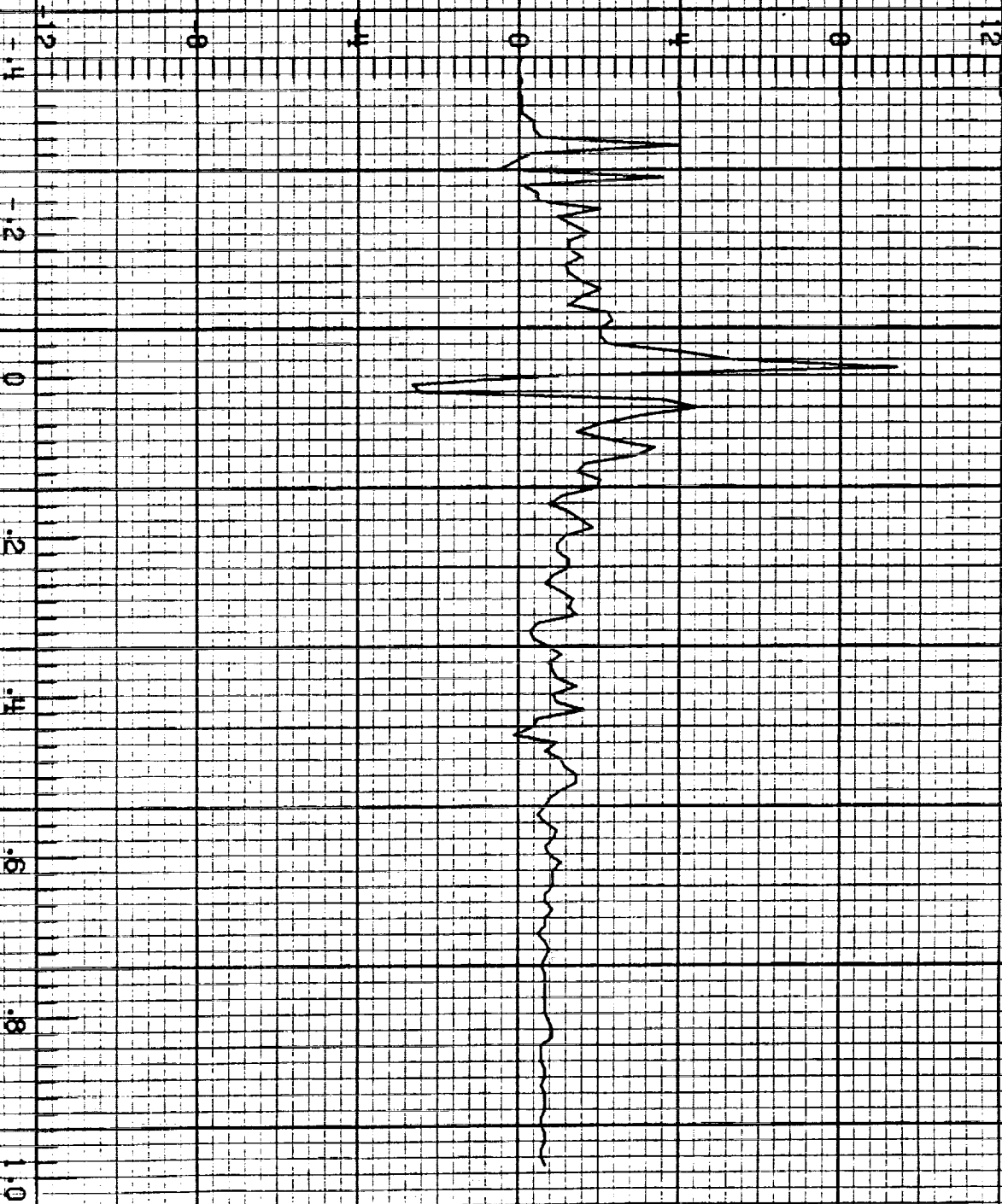
5.025

D_f A/m²

23:05:49.5
CHANNEL NO. 3.2

MICROSECONDS

1300



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

1 FC 4 RUN NO. 10

5.025

TP 100

V.

V

23:05:49.5
CHANNEL NO. 4.0

MICROSECONDS

1301

F-105 LIGHTNING/ 84-050

LECH RUN NO. 10

S.025

TP123

A

23:05:49.5
CHANNEL NO. 4.2

MICROSECONDS

F-106 LIGHTNING/ 84-050

LEC 1 RUN NO. 11

6.028

I_n A

23:08:28.5
CHANNEL NO. 1.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEO1 RUN NO. 11

5.028

I_r A

24 x 10³

23:08:28.5
CHANNEL NO. 1.2

MICROSECONDS

1304

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC2 RUN NO. 11

6.028

D_1 A/m²

23:08:28.5
CHANNEL NO. 2.0

MICROSECONDS

1305

F-106 LIGHTNING/ 84-050

1 FC2 RUN NO. 11

6.028

\dot{I} A/s

24×10^{10}

23:08:28.5
CHANNEL NO. 2.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-050

LEC 2 RUN NO. 11

3.028

$\frac{V}{s}$

23:08:28.5
CHANNEL NO. 2.2

MICROSECONDS

1307

F-106 LIGHTNING/ 84-050

LEC 3 RUN NO. 11

6.028

\dot{D}_{WT} A/m²

23:08:28.5
CHANNEL NO. 3.0

MICROSECONDS

1308

ORIGINAL PAGE IS
OF POOR QUALITY

E=106 LIGHTNING/ 84-050

LEC 3 RUN NO. 11

5.028

\dot{D}_{wl} A/m²

23:08:28.5
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-050

FCR RUN NO. 11

6.028

D_r A/m²

23:08:28.5
CHANNEL NO. 3.2

MICROSECONDS



13110

ORIGINAL PAGE IS
OF POOR QUALITY

E-106 LIGHTNING/ 84-050

LECH RUN NO. 11

8.028

TP 100

V₊ V₋

23:08:28.5
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-050

1 FC4 RUN NO. 11

6.028

TP123 A

23:08:28.5
CHANNEL NO. 4.2

MICROSECONDS

1312

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-051

LEC 1 RUN NO. 1

5.001

I_n A

19:06:07.7
CHANNEL NO. 1-1

MICROSECONDS

1313

YTDALL

F-106 LIGHTNING/ 84-051

LEC1 RUN NO. 1

2.001

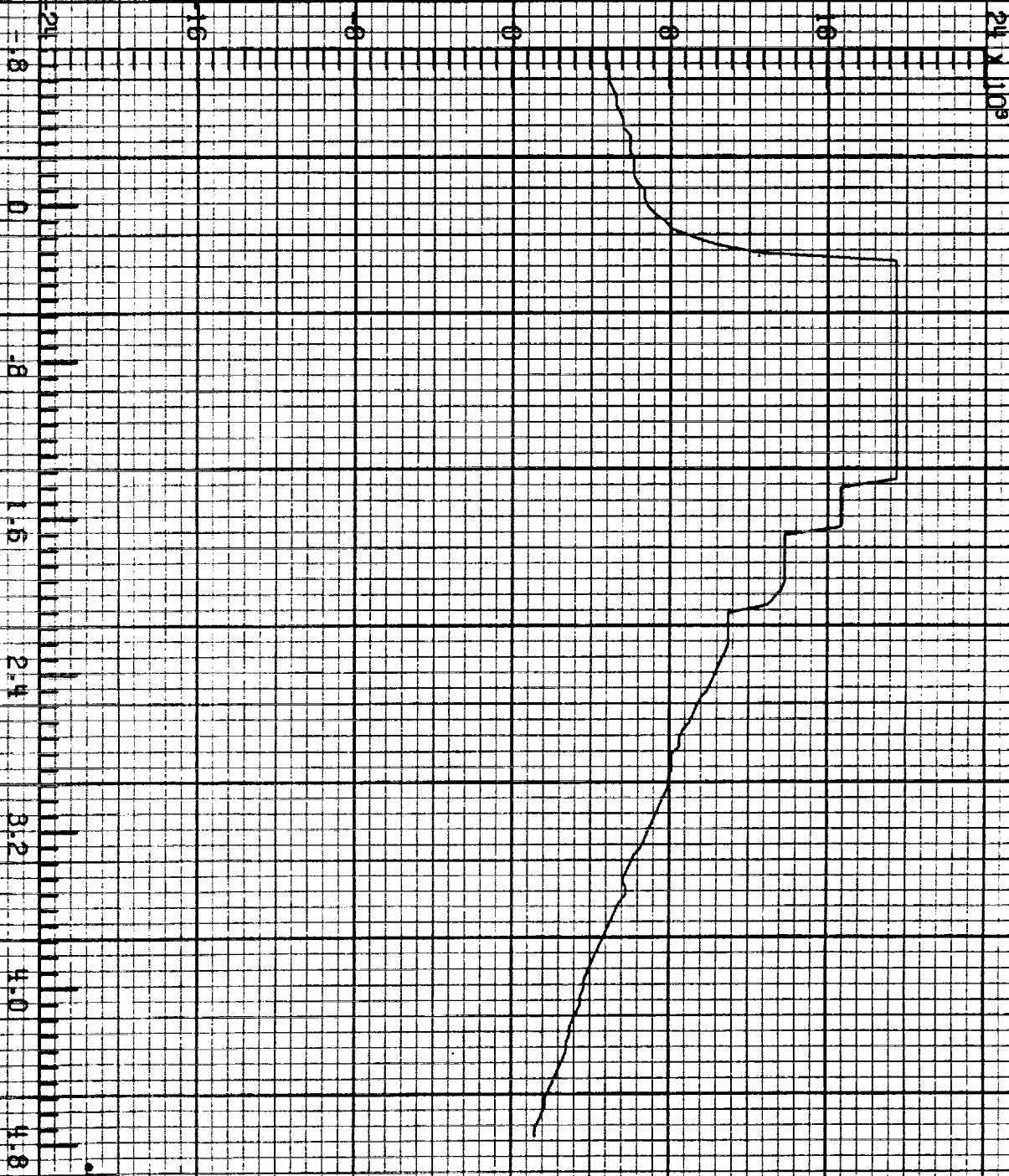
I_t A

24 x 10³

19:06:07.7
CHANNEL NO. 1.2

MICROSECONDS

1314



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-051

LEC 2 RUN NO. 1

5.001

D_t A/m^2

19:06:07.7
CHANNEL NO. 2.0

MICROSECONDS

1315

F-106 LIGHTNING/ 84-051

LEC 2 RUN NO. 1

S.001

I A/s

24 X 10¹⁰

19:06:07.7
CHANNEL NO. 2.1

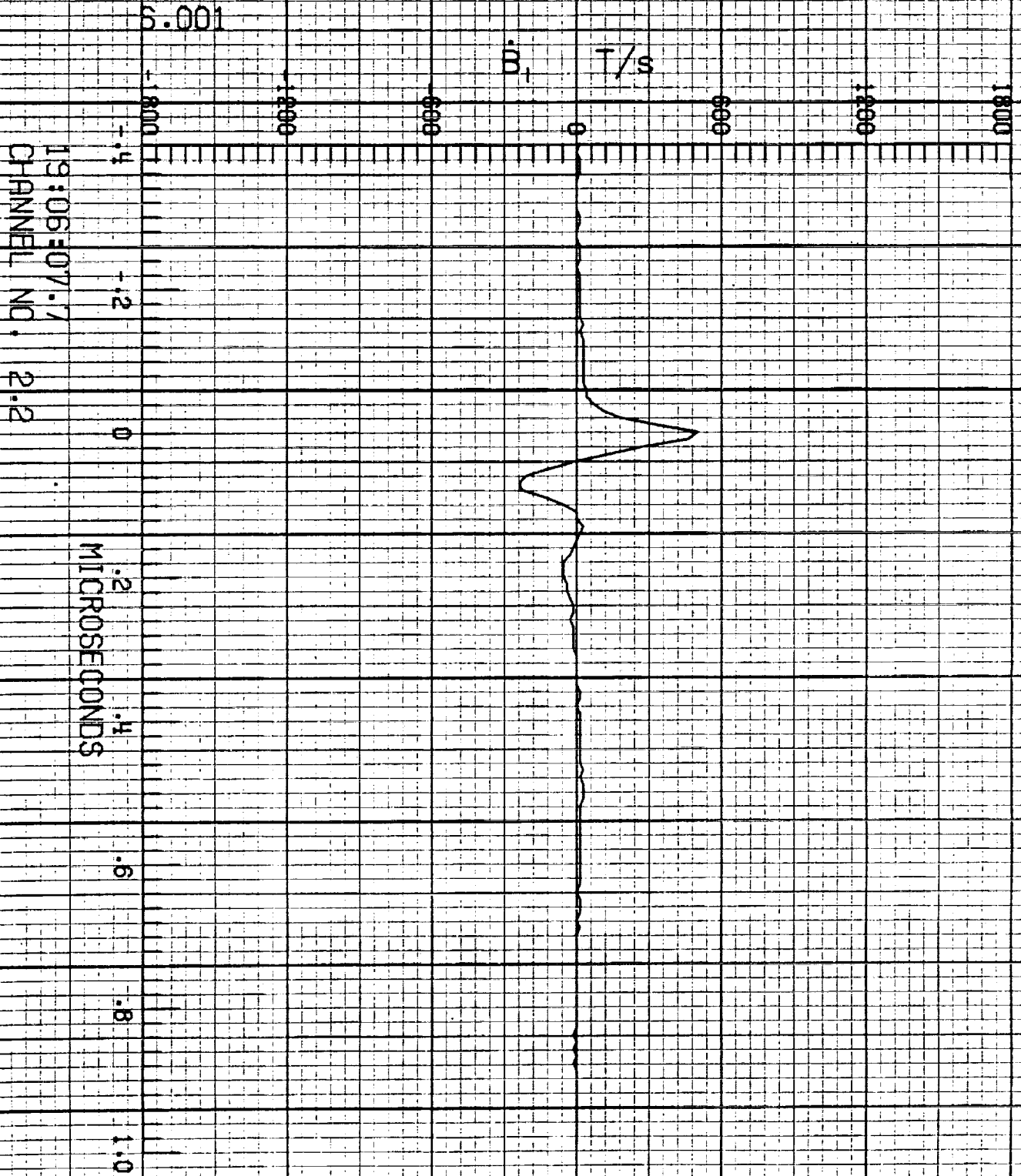
MICROSECONDS

1316

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-051

LEC 2 RUN NO. 1



F-106 LIGHTNING/ 84-051

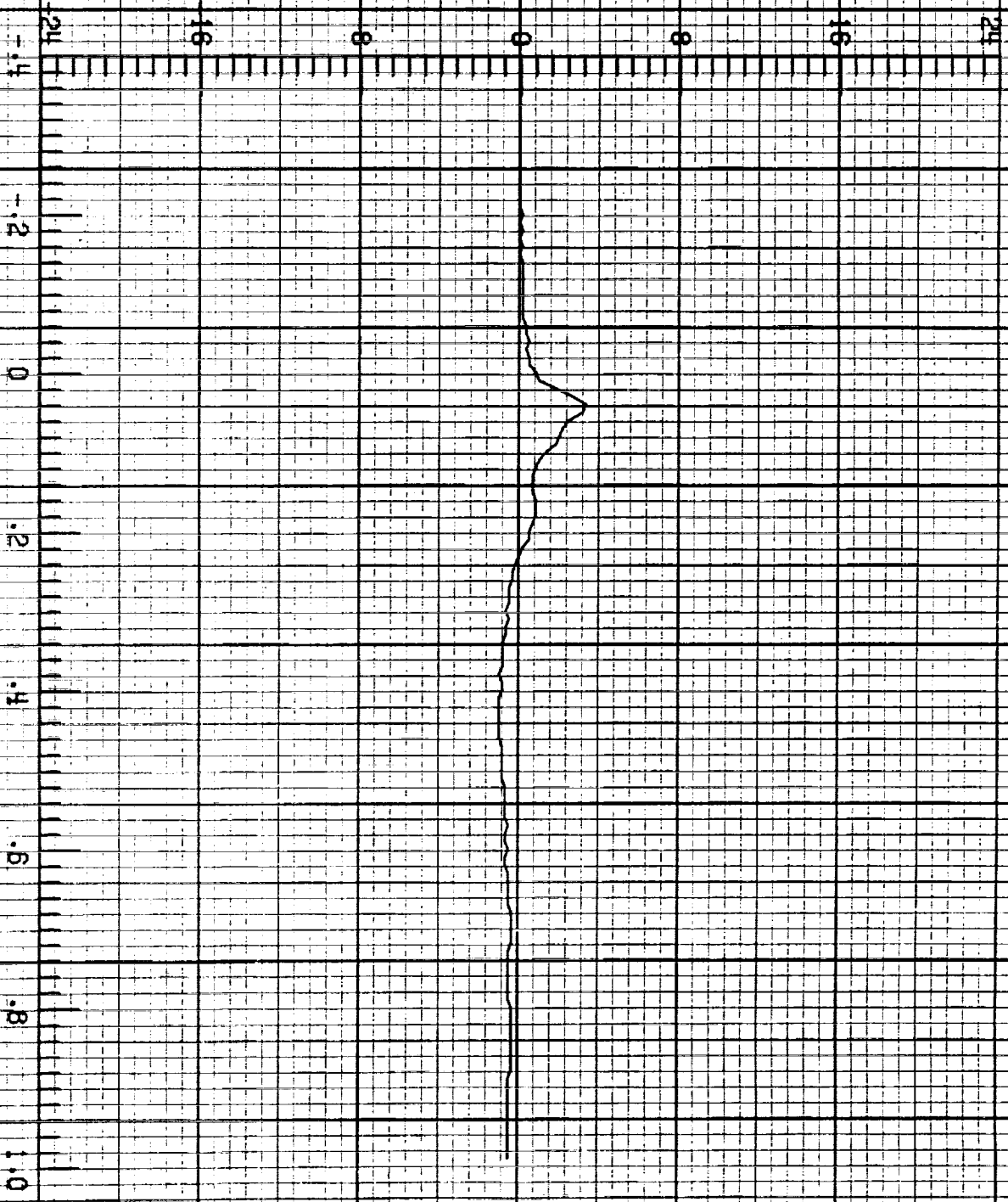
LEC 3 RUN NO. 1

3.001

\dot{D}_{wr} A/m²

19:06:07.7
CHANNEL NO. 3-D

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-051

LEC 3 RUN NO. 1

6.001

\dot{D}_w A/m²

19:06:07.7
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-051

LEC 3 RUN NO. 1

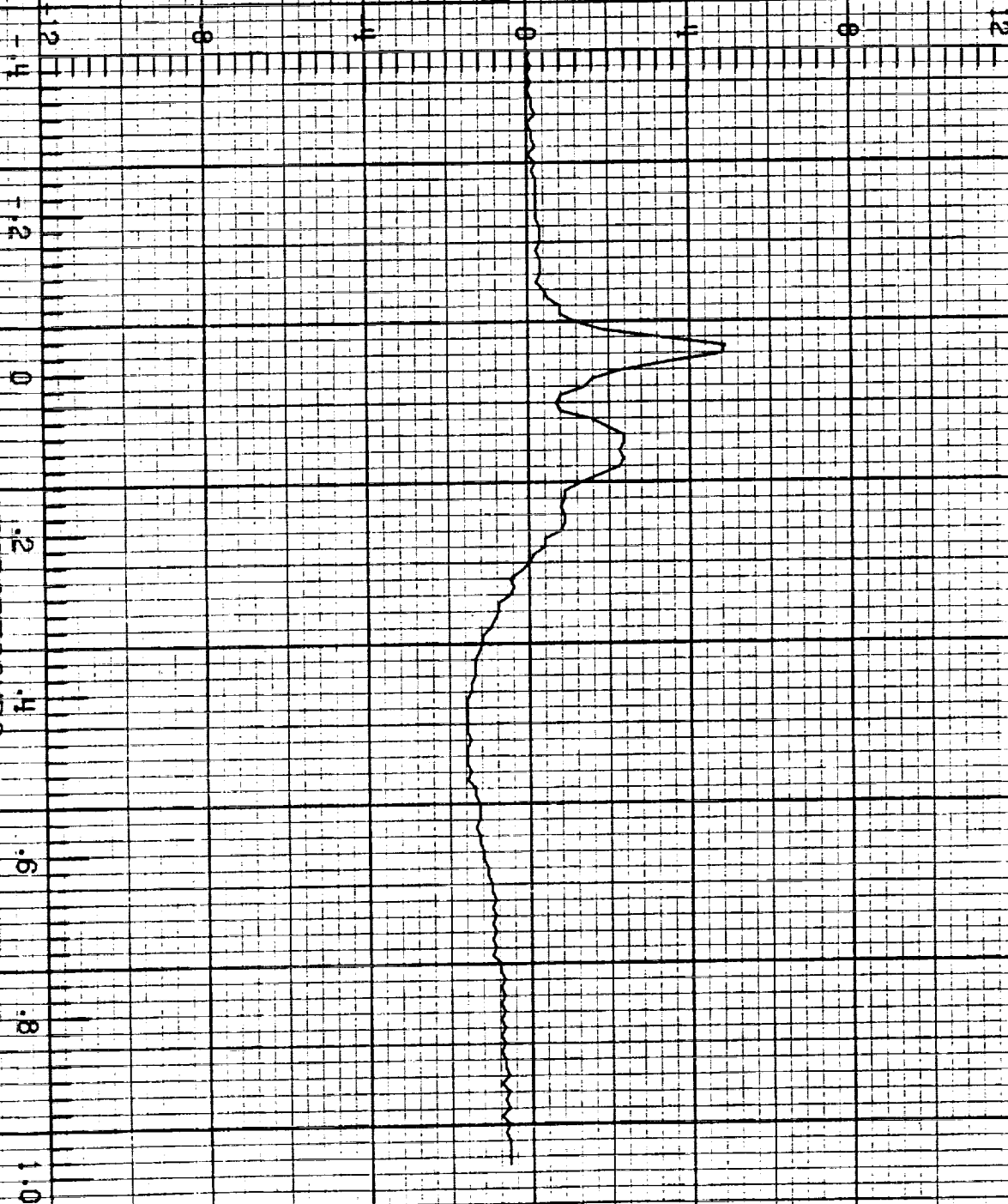
6.001

D_r A/m²

19:06:07.7
CHANNEL NO. 3.2

MICROSECONDS

1320



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-051

1 EC 4 RUN NO. 1

5.001

TP114 A

19:06:07.7
CHANNEL NO. 4.0

MICROSECONDS

1321

F-106 LIGHTNING/ 84-051

LEC 4 RUN NO. 1

S.001

TP116 A

19:06:07.7
CHANNEL NO. 4.1

MICROSECONDS

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-051

EC 4 RUN NO. 1

6.001

TP125 A

19:06:07.7
CHANNEL NO. 4.2

MICROSECONDS

1323

F-106 LIGHTNING/ 84-052

LEC 1 RUN NO. 1

5.001

I_n A

10×10^3

-18

-12

-6

0

6

12

0

.8

MICROSECONDS

1.6

2.4

3.2

4.0

4.8

13:01:54.5
CHANNEL NO. 1.1

1324

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-052

1 FC 1 RUN NO. 1

6.001

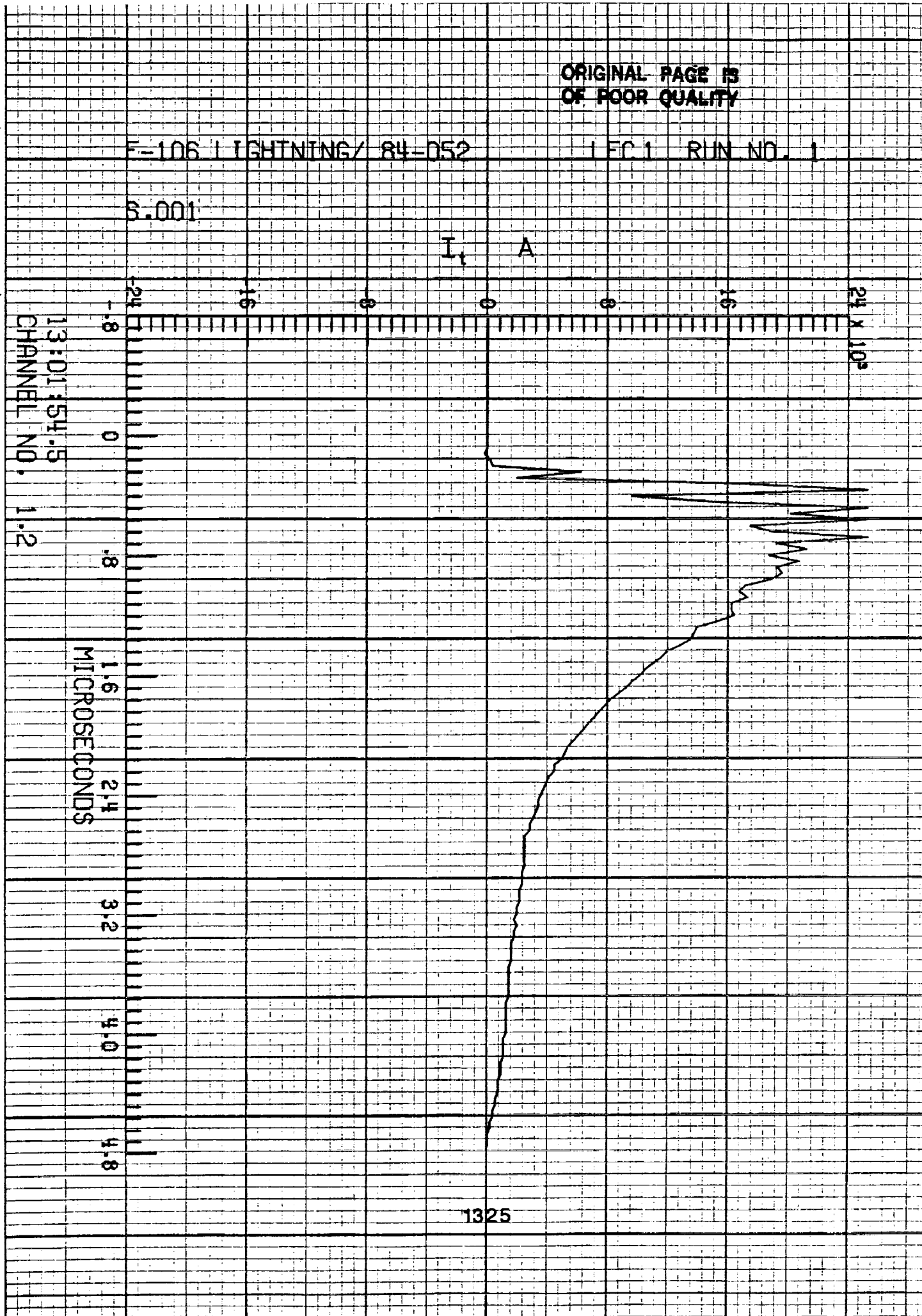
I_t A

13:01:54.5
CHANNEL NO. 1.2

MICROSECONDS

24×10^3

1325



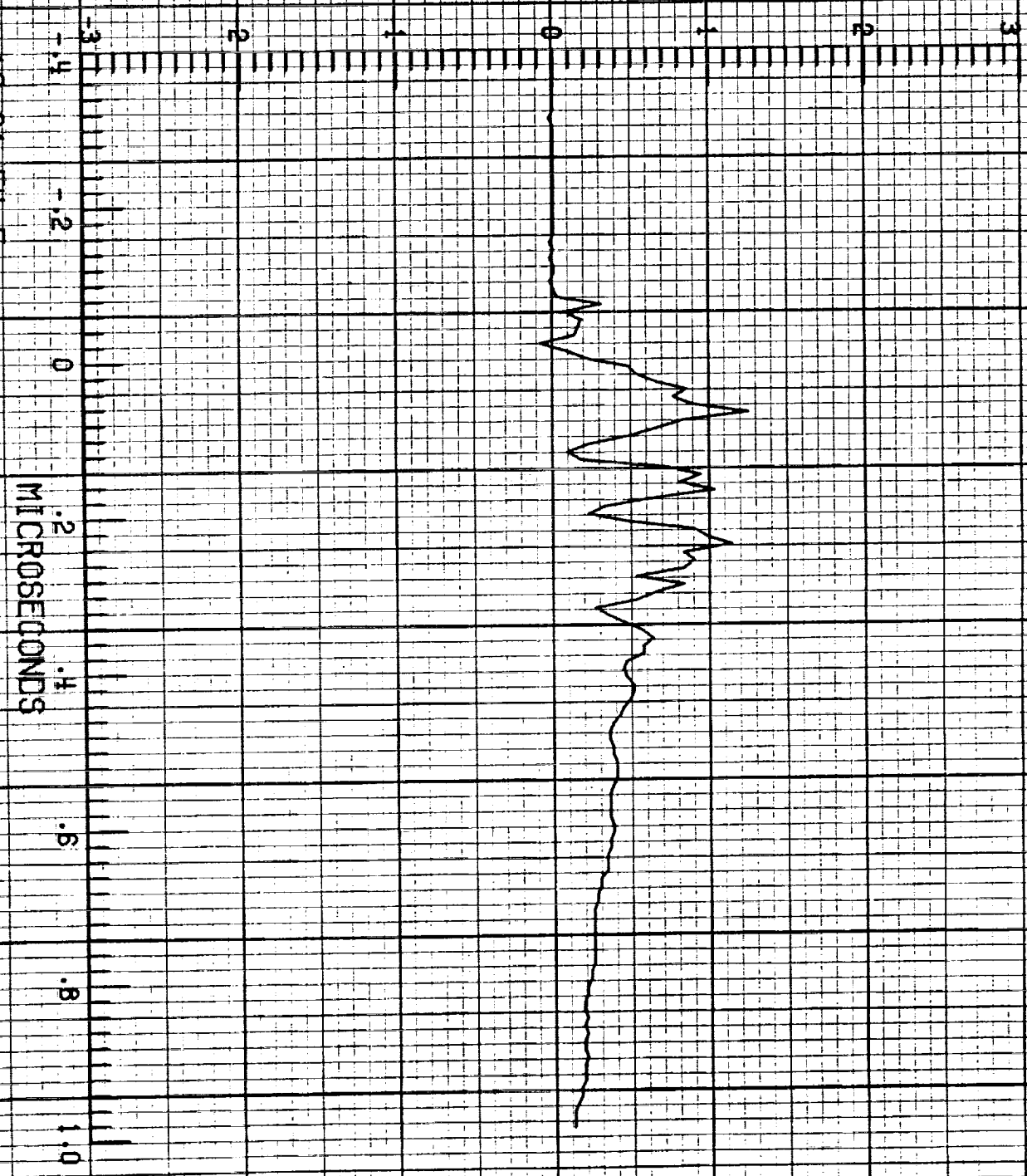
-106 LIGHTNING/ 84-052

LECC2 RUN NO. 1

6.001

\dot{D}_t A/m²

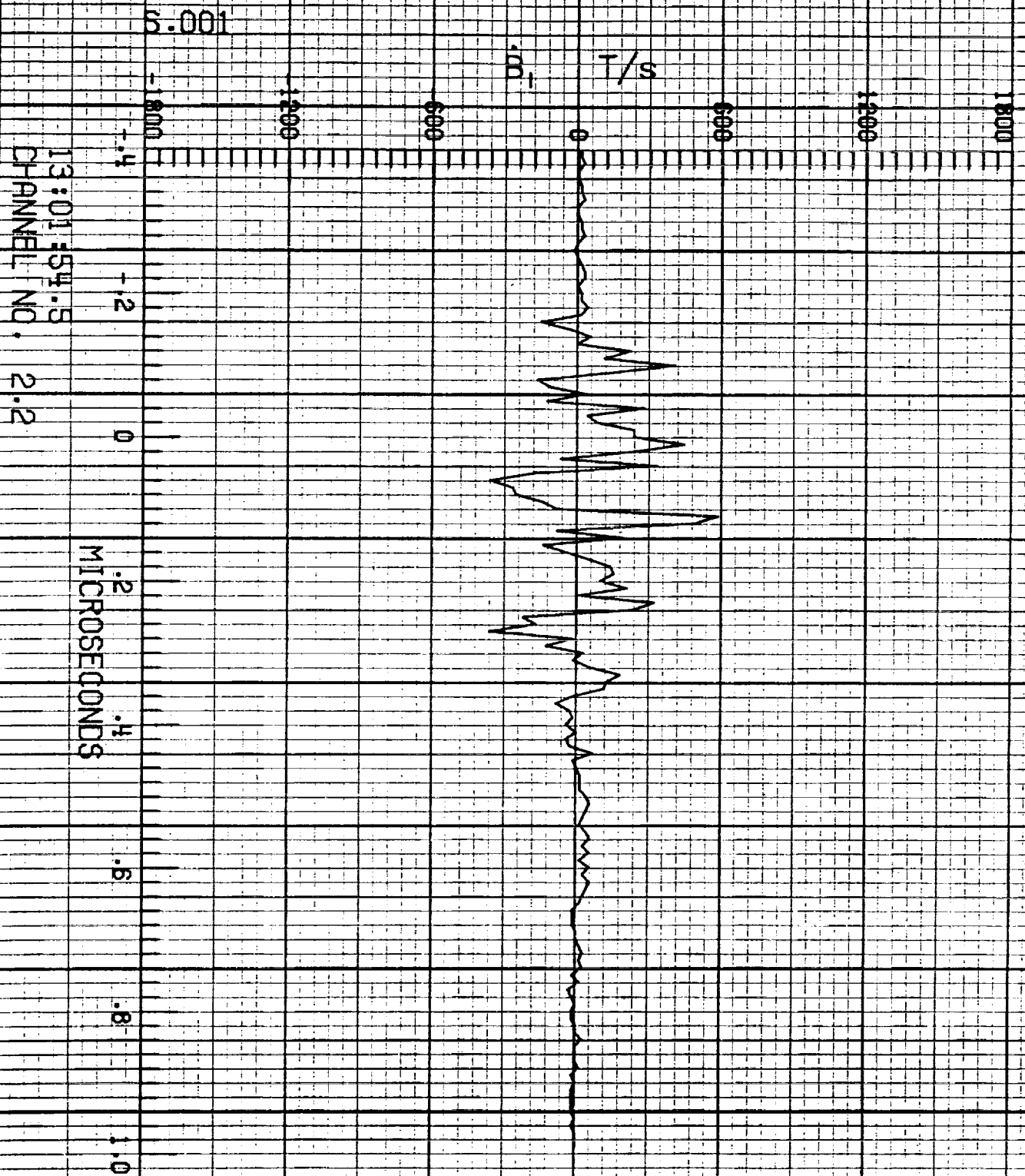
13:01:54.5
CHANNEL NO. 2.0



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OF POOR QUALITY

F-106 LIGHTNING/ 84-052

LEC 2 RUN NO. 1



F-106 LIGHTNING/ 84-052

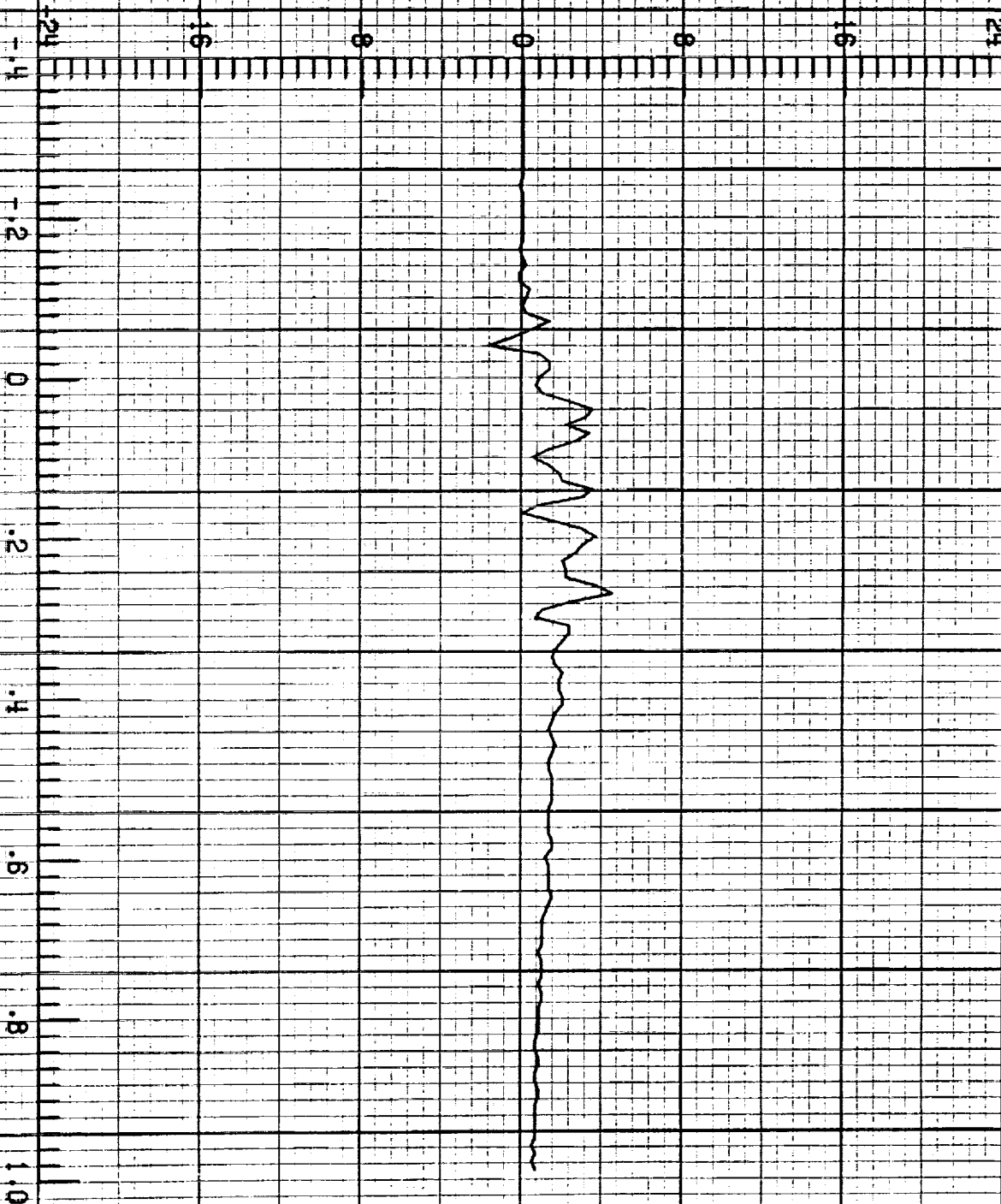
1 EC.3 RUN NO. 1

5.001

\hat{D}_{wr} A/m²

13:01:54.5
CHANNEL NO. 3.0

MICROSECONDS



1326

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-052

1 FC3 RUN NO. 1

3.001

\dot{D}_w A/m²

13:01:54.5
CHANNEL NO. 3.1

MICROSECONDS

F-106 LIGHTNING/ 84-052

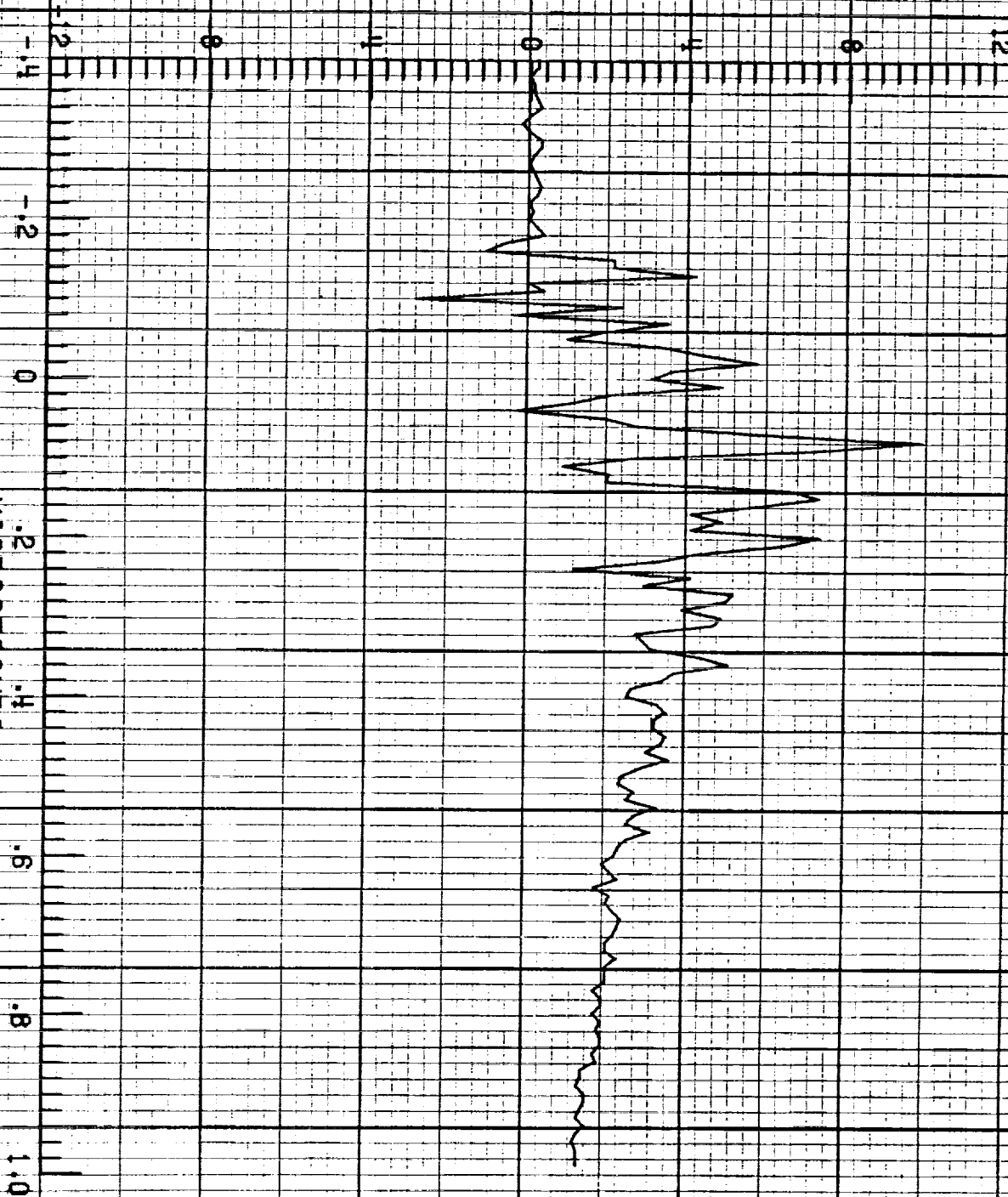
1 EC-3 RUN NO. 1

5.001

\dot{D}_r A/m²

13:01:54.5
CHANNEL NO. 3.2

MICROSECONDS



ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-052

1 FC 4 RUN NO. 1

5.001

TP114 A

13:01:54.5
CHANNEL NO. 4.0

MICROSECONDS

1331

F-106 LIGHTNING/ 84-052

1 EC 4 RUN NO. 1

6.001

TP116 A

13:01:54.5
CHANNEL NO. 4.1

MICROSECONDS

1332

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-052

LEC 4 RUN NO. 1

8.001

TP125 A

13:01:54.5
CHANNEL NO. 4.2

MICROSECONDS

1333

F-106 LIGHTNING/ 84-052

1 EC 1 RUN NO. 2

6.002

I_n A

10×10^3

13:02:22.7
CHANNEL NO. 1.1

MICROSECONDS

F-106 LIGHTNING/ 84-052

LEC 1 RUN NO. 2

5.002

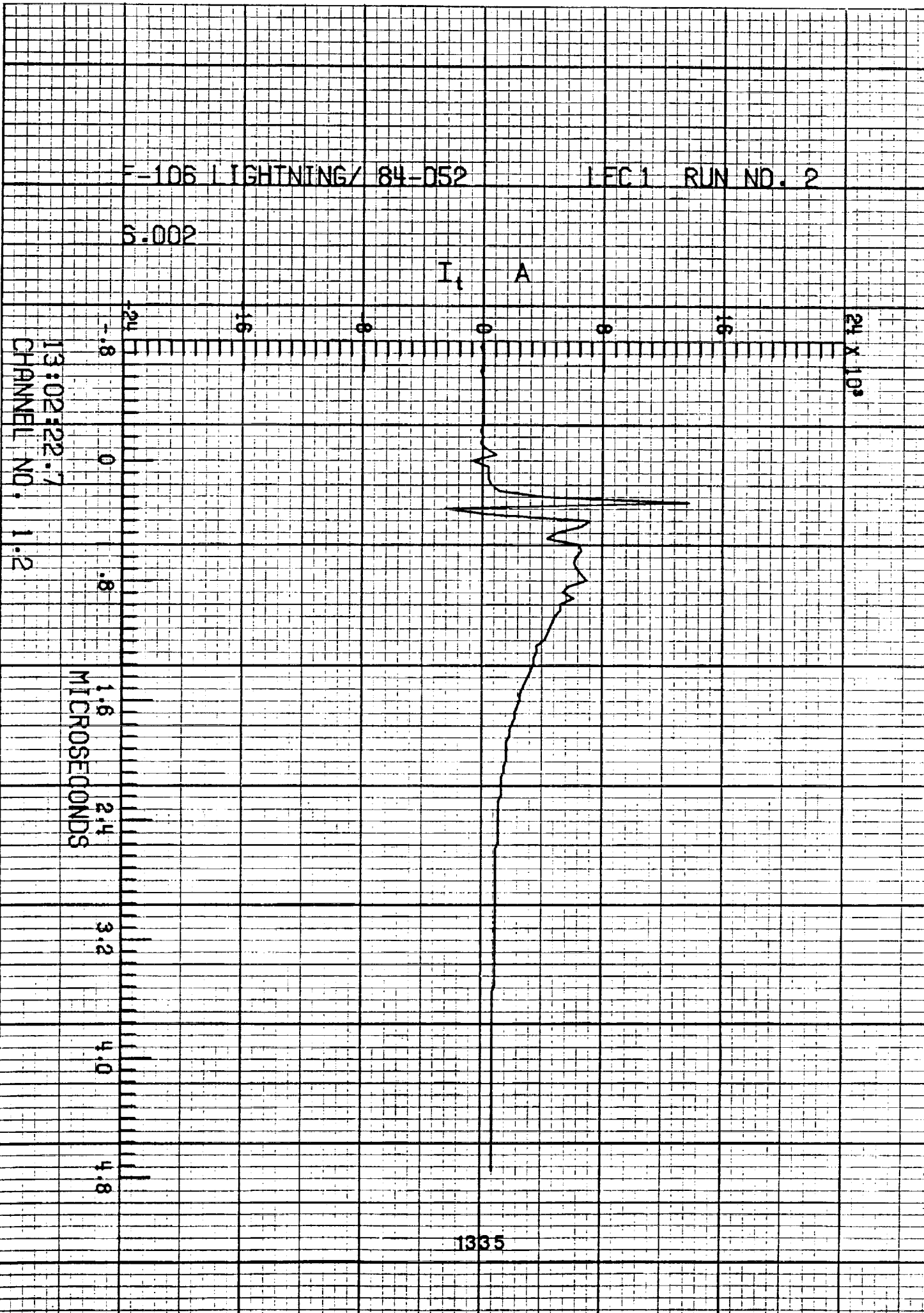
I_t A

13:02:22.7
CHANNEL NO. 1.2

MICROSECONDS

24×10^3

1335



F-106 LIGHTNING/ 84-052

LEC 2 RUN NO. 2

6.002

\dot{D}_t A/m²

13:02:22.7
CHANNEL NO. 2.0

MICROSECONDS

1336

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-052

LEC 2 RUN NO. 2

5.002

\dot{B}_1 T/s

13:02:22.7
CHANNEL NO. 2.2

MICROSECONDS

1337

F-106 LIGHTNING/ 84-052

LEC 3 RUN NO. 2

6.002

\dot{D}_{wr} A/m²

13:02:22.7
CHANNEL NO. 3.0

MICROSECONDS

1338

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-052

LEC 3 RUN NO. 2

5.002

\dot{D}_w A/m²

13:02:22.7
CHANNEL NO. 3.1

MICROSECONDS

1339

F-106 LIGHTNING/ 84-052

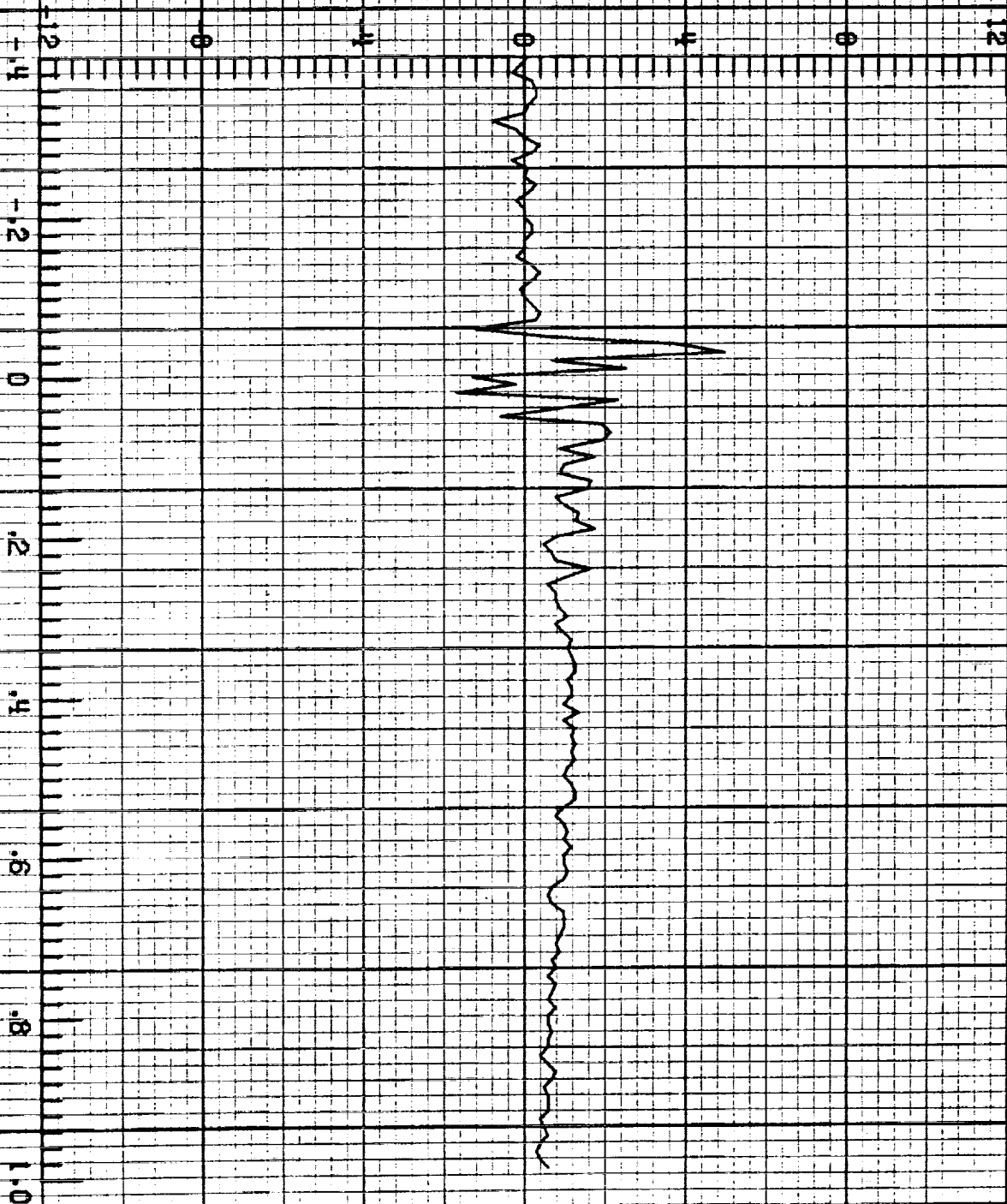
LECS RUN NO. 2

6.002

\dot{D}_r A/m²

13:02:22.7
CHANNEL NO. 3.2

MICROSECONDS



1340

F-106 LIGHTNING/ 84-052

LEC4 RUN NO. 2

3.002

TP114 A

13:02:22.7
CHANNEL NO. 4.0

MICROSECONDS

F-106 LIGHTNING/ 84-052

1 FC 4 RUN NO. 2

5.002

TP116

A

13:02:22.7
CHANNEL NO. 4.1

MICROSECONDS

1342

ORIGINAL PAGE IS
OF POOR QUALITY

F-106 LIGHTNING/ 84-052

IFC 4 RUN NO. 2

S.002


TP125 A

13:02:22.7
CHANNEL NO. 4.2

MICROSECONDS

81 53AF JWA-
YTIAUC 9000 4

Standard Bibliographic Page

1. Report No. NASA TM-87690, Part 3		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle 1984 Direct Strike Lightning Data				5. Report Date September 1986	
				6. Performing Organization Code 505-66-21-04	
7. Author(s) Mitchel E. Thomas and Harold K. Carney				8. Performing Organization Report No.	
				10. Work Unit No.	
9. Performing Organization Name and Address NASA Langley Research Center Hampton, Virginia 23665				11. Contract or Grant No.	
				13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address National Aeronautics and Space Administration Washington, D. C. 20546				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract Data waveforms are presented which were obtained during the 1984 direct-strike lightning tests utilizing the NASA F106-B aircraft specially instrumented for lightning electromagnetic measurements. The aircraft was operated in the vicinity of the NASA Langley Research Center, Hampton, Virginia, in a thunder-storm environment to elicit strikes. Electromagnetic field data and conduction currents on the aircraft were recorded for attached lightning.					
17. Key Words (Suggested by Authors(s)) Lightning Direct-Strike Lightning Electromagnetic Measurement				18. Distribution Statement  until September 1989 Subject Category 47	
19. Security Classif.(of this report) Unclassified		20. Security Classif.(of this page) Unclassified		21. No. of Pages 364	
22. Price					

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